STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3
AMENDED REPORT ☐

APPLICATION FOR PERMIT TO DRILL	1. WELL NAME and NUMBER: NBU 921-21L1S
2. TYPE OF WORK: DRILL NEW WELL (●) REENTER P&A WELL ( ) DEEPEN WELL ( )	3. FIELD OR WILDCAT: NATURAL BUTTES
4. TYPE OF WELL: Gas Well Coalbed Methane Well: NO	5. UNIT or COMMUNITIZATION AGREEMENT NAME: NATURAL BUTTES
6. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	7. OPERATOR PHONE: 720 929-6587
8. ADDRESS OF OPERATOR: P.O. Box 173779, Denver, CO, 80217	9. OPERATOR E-MAIL: mary.mondragon@anadarko.com
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE): UTU-0576	11. MINERAL OWNERSHIP: FEDERAL (●) INDIAN ( ) STATE ( ) FEE ( )
	12. SURFACE OWNERSHIP: FEDERAL ( ) INDIAN (●) STATE ( ) FEE ( )
13. NAME OF SURFACE OWNER (if box 12 = 'fee')	14. SURFACE OWNER PHONE (if box 12 = 'fee')
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')	16. SURFACE OWNER E-MAIL (if box 12 = 'fee')
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN'): Ute	18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS: YES ( ) (Submit Commingling Application) NO (●)
	19. SLANT: VERTICAL ( ) DIRECTIONAL (●) HORIZONTAL ( )

20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	2298 FNL 683 FWL	SWNW	21	9.0 S	21.0 E	S
Top of Uppermost Producing Zone	2434 FSL 674 FWL	NWSW	21	9.0 S	21.0 E	S
At Total Depth	2434 FSL 674 FWL	NWSW	21	9.0 S	21.0 E	S

21. COUNTY: UINTAH	22. DISTANCE TO NEAREST LEASE LINE (Feet): 674	23. NUMBER OF ACRES IN DRILLING UNIT: 1480
	25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed): 20	26. PROPOSED DEPTH: MD: 10135 TVD: 10100
27. ELEVATION - GROUND LEVEL: 4838	28. BOND NUMBER: WYB000291	29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE: Permit #43-8496

ATTACHMENTS

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORCANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES

☑ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER	☑ COMPLETE DRILLING PLAN
☐ AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)	☐ FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER
☐ DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)	☑ TOPOGRAPHICAL MAP

NAME: Kevin McIntyre	TITLE: Regulatory Analyst I	PHONE: 720 929-6226
SIGNATURE	DATE: 09/22/2008	EMAIL: Kevin.McIntyre@anadarko.com

API NUMBER ASSIGNED
43047501010000

APPROVAL

Permit Manager

Proposed Hole, Casing, and Cement						
String	**Hole Size**	**Casing Size**	**Top (MD)**	**Bottom (MD)**		
Surf	12.25	9.625	0	2600		
Pipe	**Grade**	**Length**	**Weight**			
	Grade J-55 LT&C	2600	36.0			
	Cement Interval	**Top (MD)**	**Bottom (MD)**			
		0	2600			
		Cement Description	**Class**	**Sacks**	**Yield**	**Weight**
			Premium Foamed Cement	215	1.18	15.6

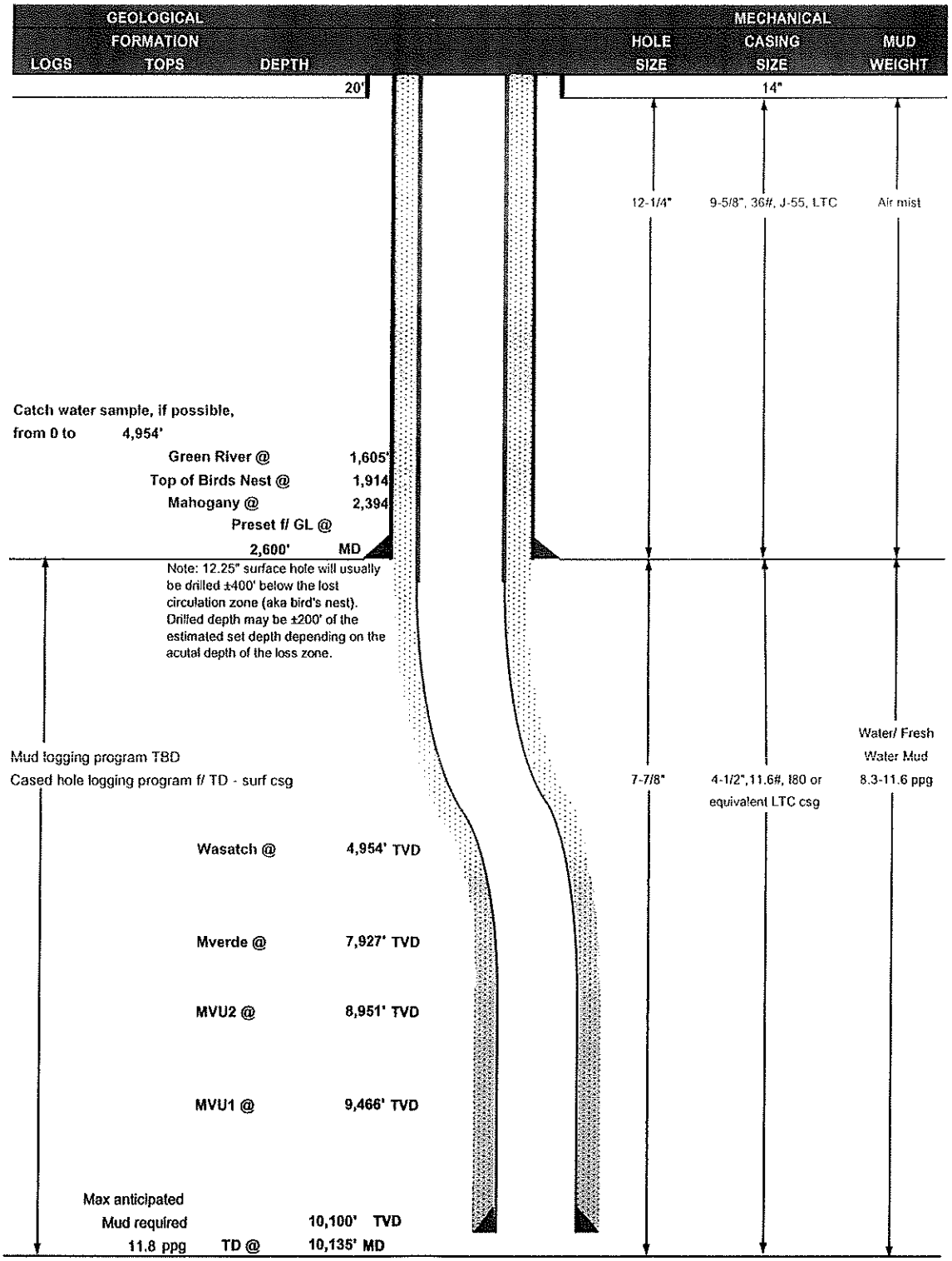
Proposed Hole, Casing, and Cement						
String	**Hole Size**	**Casing Size**	**Top (MD)**	**Bottom (MD)**		
Prod	7.875	4.5	0	10100		
Pipe	**Grade**	**Length**	**Weight**			
	Grade I-80 LT&C	10100	11.6			
	Cement Interval	**Top (MD)**	**Bottom (MD)**			
		0	10100			
		Cement Description	**Class**	**Sacks**	**Yield**	**Weight**
			Premium Lite High Strength	430	3.38	11.0
			Pozzuolanic Cement	1390	1.31	14.3

KerrMcGee

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP		DATE	September 8, 2008	
WELL NAME	NBU 921-21L1S		TD	10,100' TVD	10,135' MD
FIELD	Natural Buttes	COUNTY Uintah	STATE Utah	ELEVATION	4,838' GL KB 4,853'
SURFACE LOCATION	SWNW 2298' FNL & 683' FWL, Sec. 21, T 9S R 21E				
	Latitude: 40.022561	Longitude: -109.563033		NAD 27	
BTM HOLE LOCATION	NWSW 2434' FSL & 674' FWL, Sec. 21, T 9S R 21E				
	Latitude: 40.021014	Longitude: -109.563064		NAD 27	
OBJECTIVE ZONE(S)	Wasatch/Mesaverde				
ADDITIONAL INFO	Regulatory Agencies: BLM (MINERALS), BIA(SURFACE), UDOGM, Tri-County Health Dept.				



KerrMcGee

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'						
						3520	2020	453000
SURFACE	9-5/8"	0 to 2600	36.00	J-55	LTC	0.89	1.66	6.16
						7780	6350	201000
PRODUCTION	4-1/2"	0 to 10100	11.60	I-80	LTC	1.96	1.02	1.96

1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point)

2) MASP (Prod Casing) = Pore Pressure at TD - (.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD = 11.8 ppg) .22 psi/ft = gradient for partially evac wellbore

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

MASP 4040 psi

CEMENT PROGRAM

		FT OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500	Premium cmt + 2% CaCl + .25 pps flocele	215	60%	15.60	1.18
Option 1	TOP OUT CMT (1)	200	20 gals sodium silicate + Premium cmt + 2% CaCl + .25 pps flocele	50		15.60	1.18
	TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE			NOTE: If well will circulate water to surface, option 2 will be utilized				
Option 2	LEAD	1500	65/35 Poz + 6% Gel + 10 pps gilsonite +.25 pps Flocele + 3% salt BWOW	360	35%	12.60	1.81
	TAIL	500	Premium cmt + 2% CaCl + .25 pps flocele	180	35%	15.60	1.18
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	4,445'	Premium Lite II + 3% KCl + 0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	430	40%	11.00	3.38
	TAIL	5,690'	50/50 Poz/G + 10% salt + 2% gel +.1% R-3	1390	40%	14.30	1.31

*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.
PRODUCTION	Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. Test to 5,000 psi (annular to 2,500 psi) prior to drilling out. Record on chart recorder & tour sheet. Function test rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kelly to be equipped with upper & lower kelly valves.

Drop Totco surveys every 2000'. Maximum allowable hole angle is 5 degrees.

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER: _____ **DATE:** _____

Brad Laney

DRILLING SUPERINTENDENT: _____ **DATE:** _____

Randy Bayne

NBU 921-21L1S
Twin to NBU #127
SWNW Sec. 21, T9S,R21E
UINTAH COUNTY, UTAH
UTU-0576

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. **Estimated Tops of Important Geologic Markers:**

Formation	Depth
Uinta	0- Surface
Green River	1605'
Bird's Nest	1914'
Mahogany	2394'
Wasatch	4954'
Mesaverde	7927'
MVU2	8951'
MVL1	9466'
TVD	10,100'
TD	10,135'

2. **Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:**

Substance	Formation	Depth
	Green River	1605'
	Bird's Nest	1914'
	Mahogany	2394'
Gas	Wasatch	4954'
Gas	Mesaverde	7927'
Gas	MVU2	8951'
Gas	MVL1	9466'
Water	N/A	
Other Minerals	N/A	

3. **Pressure Control Equipment** (Schematic Attached)

Please see the Natural Buttes Unit Standard Operating Procedure (SOP).

4. **Proposed Casing & Cementing Program:**

Please see the Natural Buttes Unit SOP.

5. **Drilling Fluids Program:**

Please see the Natural Buttes Unit SOP.

6. **Evaluation Program:**

Please see the Natural Buttes Unit SOP.

7. **Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated at 10,100' TD, approximately equals 6262 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 4040 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. **Anticipated Starting Dates:**

Drilling is planned to commence immediately upon approval of this application.

9. **Variances:**

Please see Natural Buttes Unit SOP Onshore Order #2 – Air Drilling Variance
Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- *Blowout Prevention Equipment (BOPE) requirements;*
- *Mud program requirements; and*
- *Special drilling operation (surface equipment placement) requirements associated with air drilling.*

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

Background
In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the

surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12-1/4 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 12-1/4 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 9-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

Variance for BOPE Requirements
The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

Variance for Mud Material Requirements
Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements
Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi.

The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

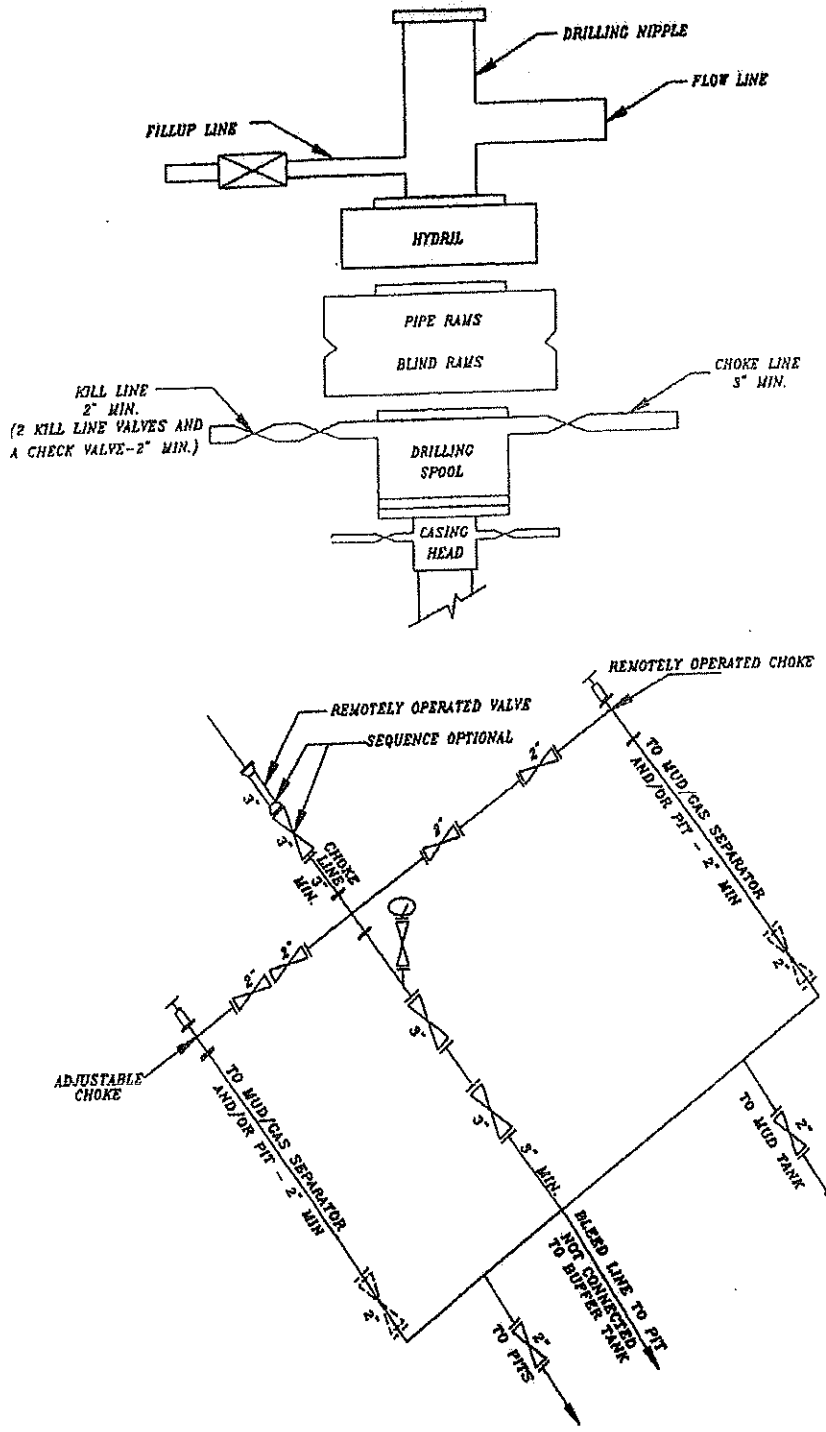
Conclusion
The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above..

10. Other Information:

Please see Natural Buttes Unit SOP.

NBU 921-21L1S

EXHIBIT A



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

NBU 921-21L1S
Twin to NBU #127
SWNW Sec. 21 ,T9S,R21E
UINTAH COUNTY, UTAH
UTU-0576

ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN

1. **Existing Roads:**

   Refer to the attached location directions.

   Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

2. **Planned Access Roads:**

   No new access road is planned, as this is a twin location. Refer to Topo Map B.

   Existence of pipelines; maximum grade; turnouts; major cut and fills, culverts, or bridges; gates, cattle guards, fence cuts, or modifications to existing facilities were determined at the on-site.

   Please see the Natural Buttes Unit Standard Operating Procedure (SOP).

3. **Location of Existing Wells Within a 1-Mile Radius:**

   Please refer to Topo Map C.

4. **Location of Existing & Proposed Facilities:**

   Please see the Natural Buttes Unit SOP.

   Refer to Topo Map D for the location of the proposed pipelines.

   A 2600' rights-of-way will be required. Approximately 2600' of 4" steel pipeline is proposed from the location to the tie-in point in Section 16, T9S, R21E. Please refer to the Topo Map D. The pipeline will be constructed utilizing existing rights were possible and pulled into place using a rubber tired tractor. The pipeline will be butt-welded together.

Variances to Best Management Practices (BMPs) Requested:

Approximately 2600' of 4" steel pipeline will be installed on surface within the access corridor for the well location. As a Best Management Practice (BMP), the pipeline would be buried within the access road corridor if possible. The construction of pipelines requires the corridor of 30 feet.

This exception to the BMP should be granted by the BLM Authorized Officer because indurated bedrock, such as sandstone, is at or within 2 feet of the surface and the soil has a poor history for successful rehabilitation.

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The requested color is Carlsbad Canyon Brown (2.5Y 6/2), a non-reflective earthtone.

Interim Surface Reclamation Plan:

This exception is requested due to the current twin and multi-well program. If determined that this well will not be a candidate for either twinning &/or multi-well the operator shall spread the topsoil pile on the location up to the rig anchor points. The location will be reshaped to the original contour to the extent possible. The operator will reseed the area using the BLM recommended seed mixture and reclamation methods.

5. **Location and Type of Water Supply:**

Please see the Natural Buttes SOP.

6. **Source of Construction Materials:**

Please see the Natural Buttes SOP.

7. **Methods of Handling Waste Materials:**

Please see the Natural Buttes SOP.

A plastic reinforced liner is to be used as discussed during on-site inspection. It will be a minimum of 20 mil thick and felt, with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap that could puncture the liner will be disposed of in the pit.

Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to one of the pre-approved disposal sites: RNI, Sec. 5, T9S, R22E, NBU #159, Sec. 35, T9S R21E, Ace Oilfield, Sec. 2, T6S, R20E, MC&MC, Sec. 12, T6S, R19E, Pipeline Facility Sec. 36, T9S, R20E,Goat Pasture Evaporation Pond SW/4 Sec. 16, T10S, R22E, Bonanza Evaporation Pond Sec. 2, T10S, R23E *(Request is in lieu of filing Form 3160-5, after initial production).*

8. **Ancillary Facilities:**

Please see the Natural Buttes SOP.

9. **Well Site Layout:** (See Location Layout Diagram)

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

Location size may change prior to the drilling of the well due to the current rig availability. If the proposed location is not large enough to accommodate the drilling rig. The location will be re-surveyed and a form 3160-5 will be submitted.

10. **Plans for Reclamation of the Surface:**

Please see the Natural Buttes SOP.

upon reclamation of the pit the following seed mixture will be used. A total of 12 lbs/acre will be used if the seeds are drilled (24 lbs/acre if the seeds are broadcast). The per acre requirements for ***drilled*** seed are:

Crested Wheatgrass 12 lbs.

Operator shall call the BLM for the seed mixture when final reclamation occurs.

11. **Surface/Mineral Ownership:**

The well pad and access road are located on lands owned by:

Ute Indian Tribe
P.O. Box 70
Fort Duchesne, Utah 84026
(435) 722-5141

The mineral ownership is listed below:

United States of America
Bureau of Land Management
170 South 500 East
Vernal, UT 84078
(435)781-4400

12. Stipulations/Notices/Mitigation:

There are no stipulations or notices for this location.

13. Other Information:

A Class III archaeological survey and a paleontological survey have been performed and will be submitted.

This location is not within 460' from the boundary of the Natural Buttes Unit, nor is it within 460' of any non-committed tract lying within the boundaries of the Unit.

14. Lessee's or Operator's Representative & Certification:

Kevin McIntyre
Regulatory Analyst
Kerr-McGee Oil & Gas Onshore LP
P.O. Box 173779
Denver, CO 80217-3779
(720) 929-6226

Randy Bayne
Drilling Manager
Kerr-McGee Oil & Gas Onshore LP
1368 South 1200 East
Vernal, UT 84078
(435) 781-7018

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under the terms and conditions of the lease for the operations conducted upon leased lands.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Bureau of Land Management Nationwide Bond #WYB000291.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by the Operator, its contractors, and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Kevin McIntyre

9/8/2008
Date

Kerr-McGee Oil & Gas Onshore LP
NBU #921-21F4S, #921-21E4T, #921-21L1S & #921-21E1S
SECTION 21, T9S, R21E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 6.9 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 5.0 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTH; TURN LEFT AND PROCEED IN A NORTHERLY DIRECTION APPROXIMATELY 0.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN RIGHT AND PROCEED IN A NORTHEASTERLY DIRECTION APPROXIMATELY 1.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN LEFT AND PROCEED IN A NORTHEASTERLY DIRECTION APPROXIMATELY 2.5 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; TURN LEFT AND PROCEED IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 1.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; TURN LEFT AND PROCEED IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 0.6 MILES TO THE BEGINNING OF THE EXISTING ACCESS TO THE NORTHWEST; TURN RIGHT AND PROCEED IN A NORTHWESTERLY DIRECTION APPROXIMATELY 25' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 49.3 MILES.

Kerr-McGee Oil & Gas Onshore LP

NBU #921-21F4S, #921-21E4T, #921-21L1S & #921-21E1S

LOCATED IN UINTAH COUNTY, UTAH
SECTION 21, T9S, R21E, S.L.B.&M.

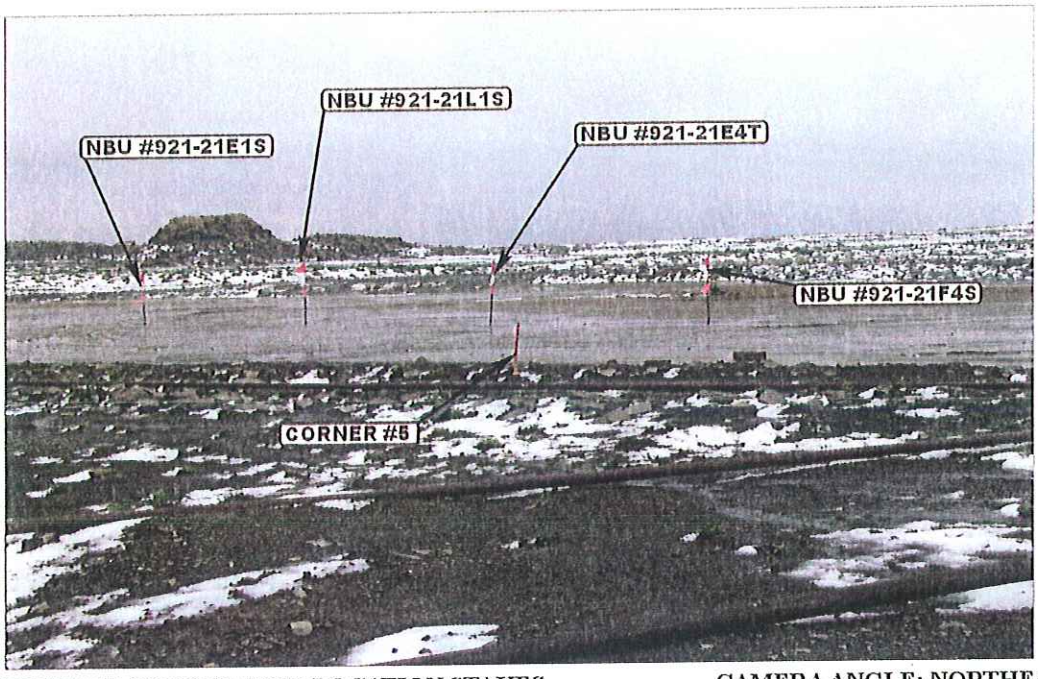


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKES — CAMERA ANGLE: NORTHEASTERLY

PHOTO: VIEW OF EXISTING ACCESS — CAMERA ANGLE: NORTHWESTERLY

- Since 1964 -
Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

LOCATION PHOTOS	06 MONTH	30 DAY	08 YEAR	PHOTO
TAKEN BY: D.K.	DRAWN BY: J.J.	REVISED: 00-00-00		

API Well No: 43047501010000

Kerr-McGee Oil & Gas Onshore LP

NBU #921-21F4S, #921-21E4T, #921-21L1S & #921-21E1S

LOCATED IN UINTAH COUNTY, UTAH
SECTION 21, T9S, R21E, S.L.B.&M.

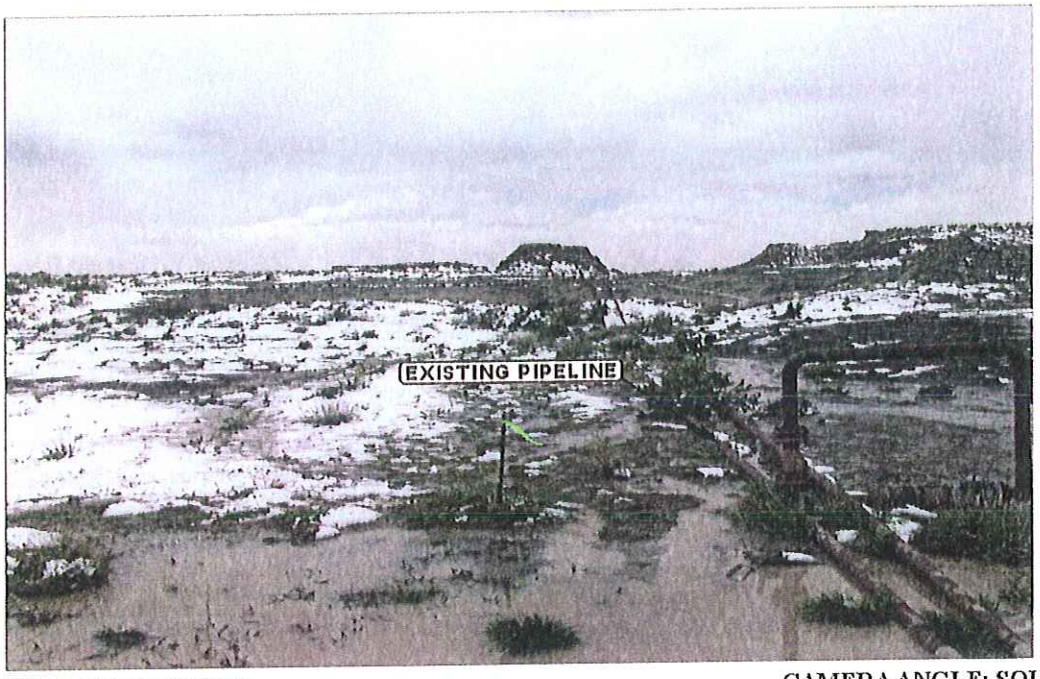


PHOTO: VIEW ALONG PIPELINE

CAMERA ANGLE: SOUTHERLY

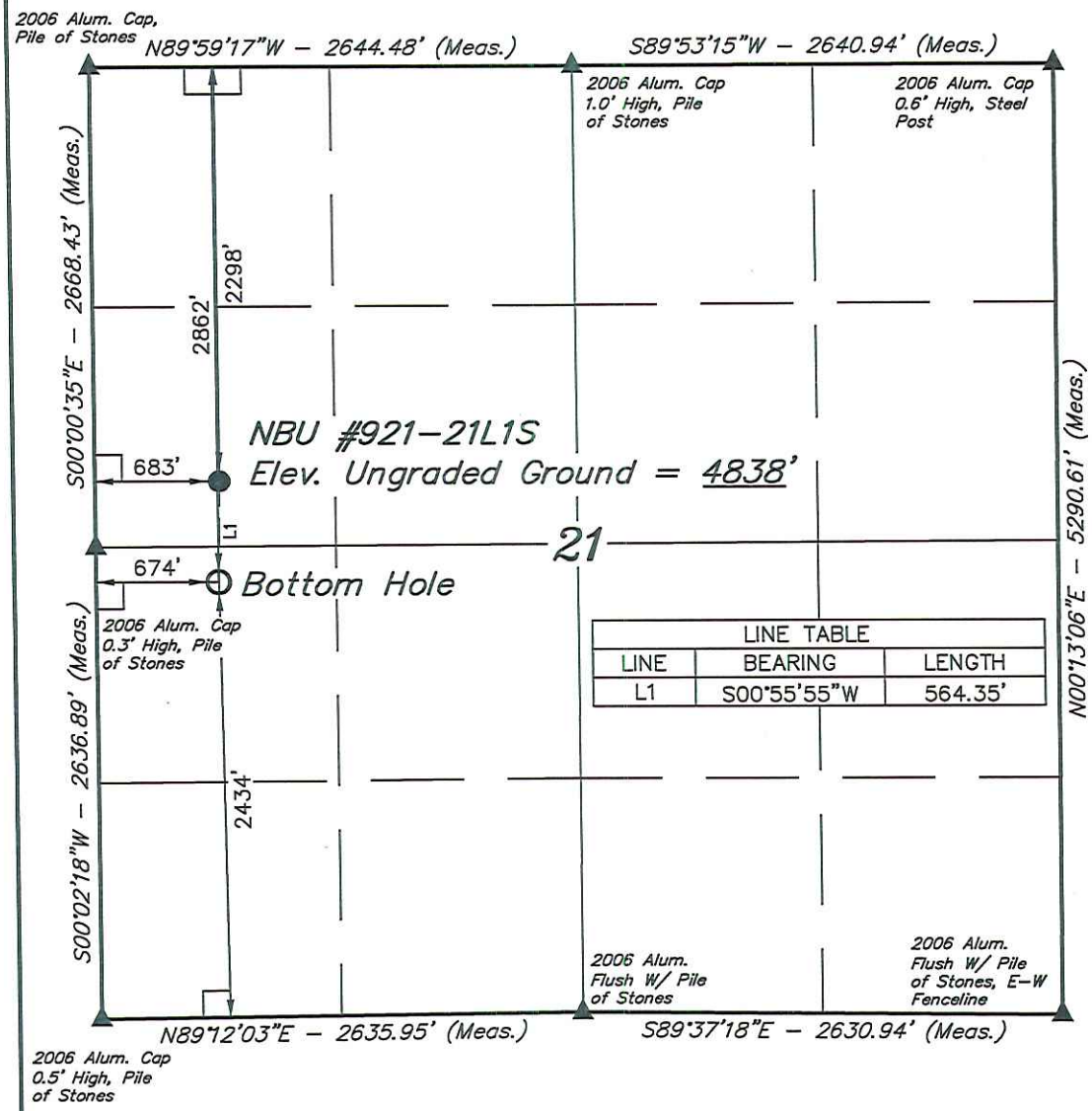
PHOTO: VIEW OF TIE-IN AT 8"

CAMERA ANGLE: SOUTHERLY

- Since 1964 -
Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

LOCATION PHOTOS	06 MONTH	30 DAY	08 YEAR	PHOTO
TAKEN BY: D.K.	DRAWN BY: J.J.	REVISED: 00-00-00		

T9S, R21E, S.L.B.&M.



LINE TABLE		
LINE	BEARING	LENGTH
L1	S00°55'55"W	564.35'

Kerr–McGee Oil & Gas Onshore LP

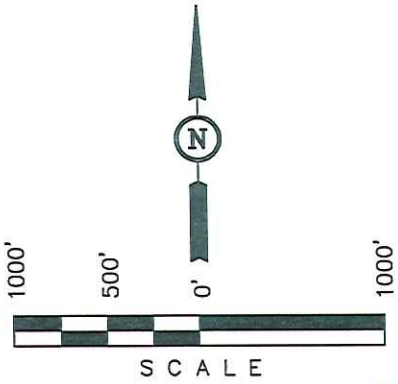
Well location, NBU #921–21L1S, located as shown in the SW 1/4 NW 1/4 of Section 21, T9S, R21E, S.L.B.&M., Uintah County, Utah.

BASIS OF ELEVATION

TWO WATER TRIANGULATION STATION LOCATED IN THE NW 1/4 OF SECTION 1, T10S, R21E, S.L.B.&M. TAKEN FROM THE BIG PACK MTN NE, QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5238 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

REGISTERED LAND SURVEYOR No. 161319 ROBERT L. KAY STATE OF UTAH

LEGEND:

└ = 90° SYMBOL

● = PROPOSED WELL HEAD.

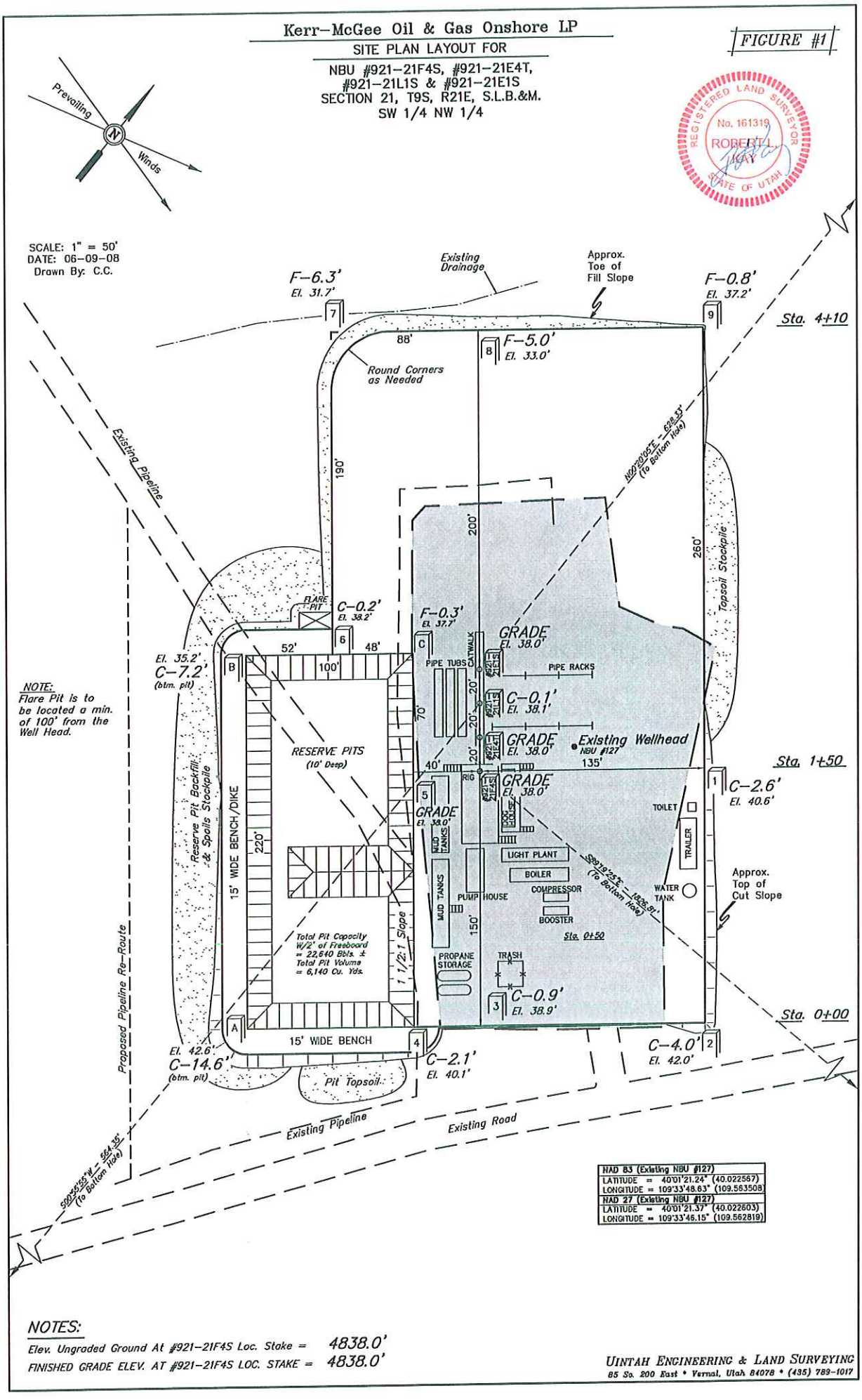
▲ = SECTION CORNERS LOCATED.

NAD 83 (TARGET BOTTOM HOLE)	NAD 83 (SURFACE LOCATION)
LATITUDE = 40°01'15.52" (40.020978)	LATITUDE = 40°01'21.09" (40.022525)
LONGITUDE = 109°33'49.51" (109.563753)	LONGITUDE = 109°33'49.40" (109.563722)
NAD 27 (TARGET BOTTOM HOLE)	**NAD 27 (SURFACE LOCATION)**
LATITUDE = 40°01'15.65" (40.021014)	LATITUDE = 40°01'21.22" (40.022561)
LONGITUDE = 109°33'47.03" (109.563064)	LONGITUDE = 109°33'46.92" (109.563033)

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST – VERNAL, UTAH 84078
(435) 789–1017

SCALE: 1" = 1000'	DATE SURVEYED: 04–30–08	DATE DRAWN: 06–09–08
PARTY: D.K. C.K. C.C.	REFERENCES: G.L.O. PLAT	
WEATHER: WARM	FILE: Kerr–McGee Oil & Gas Onshore LP	

API Well No: 43047501010000



API Well No: 43047501010000

Kerr-McGee Oil & Gas Onshore LP

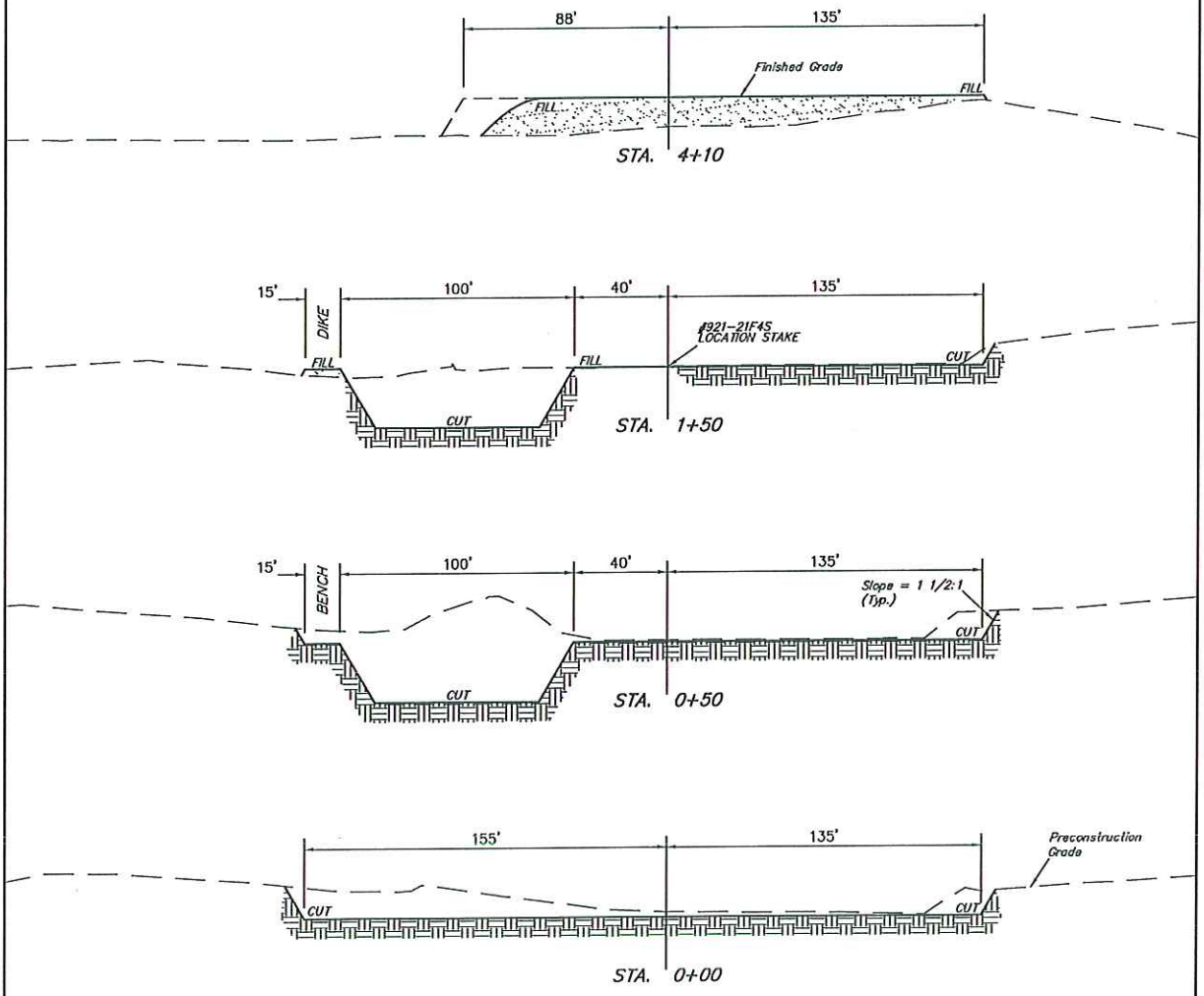
TYPICAL CROSS SECTIONS FOR
NBU #921-21F4S, #921-21E4T,
#921-21L1S & #921-21E1S
SECTION 21, T9S, R21E, S.L.B.&M.
SW 1/4 NW 1/4

FIGURE #2

1" = 20'
X-Section Scale
1" = 50'

DATE: 06-09-08
Drawn By: C.C.

REGISTERED LAND SURVEYOR
No. 161319
ROBERT L. KAY
STATE OF UTAH



* NOTE:
FILL QUANTITY INCLUDES
5% FOR COMPACTION

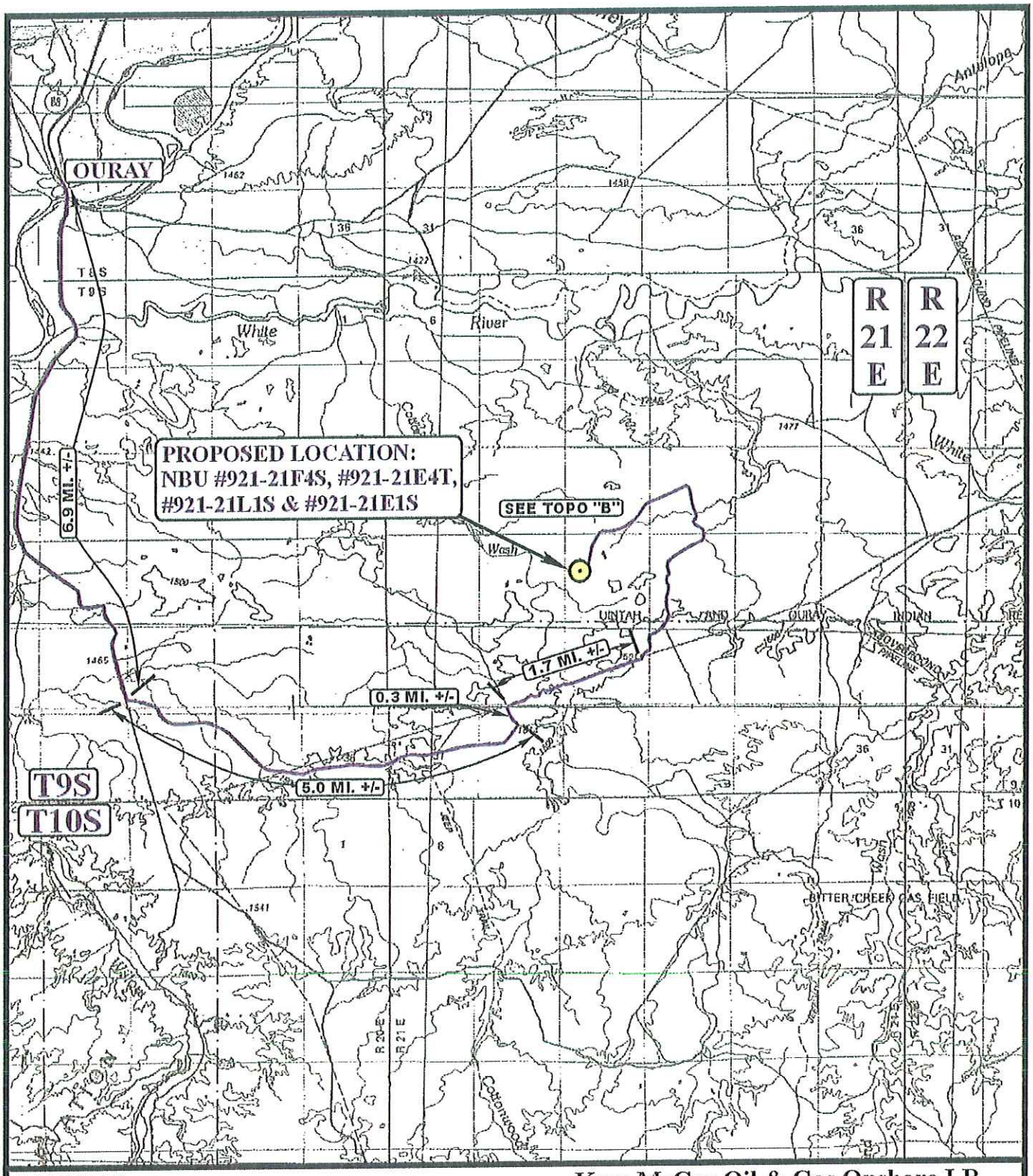
APPROXIMATE YARDAGES

CUT
(12") Topsoil Stripping = 2,370 Cu. Yds.
(New Construction Only)
Remaining Location = 7,770 Cu. Yds.

TOTAL CUT = 10,140 CU.YDS.
FILL = 5,830 CU.YDS.

EXCESS MATERIAL = 4,310 Cu. Yds.
Topsoil & Pit Backfill = 5,440 Cu. Yds.
(1/2 Pit Vol.)
DEFECIT UNBALANCE = <1,130> Cu. Yds.
(After Interim Rehabilitation)

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East • Vernal, Utah 84078 • (435) 789-1017



LEGEND:

PROPOSED LOCATION

N

Kerr-McGee Oil & Gas Onshore LP

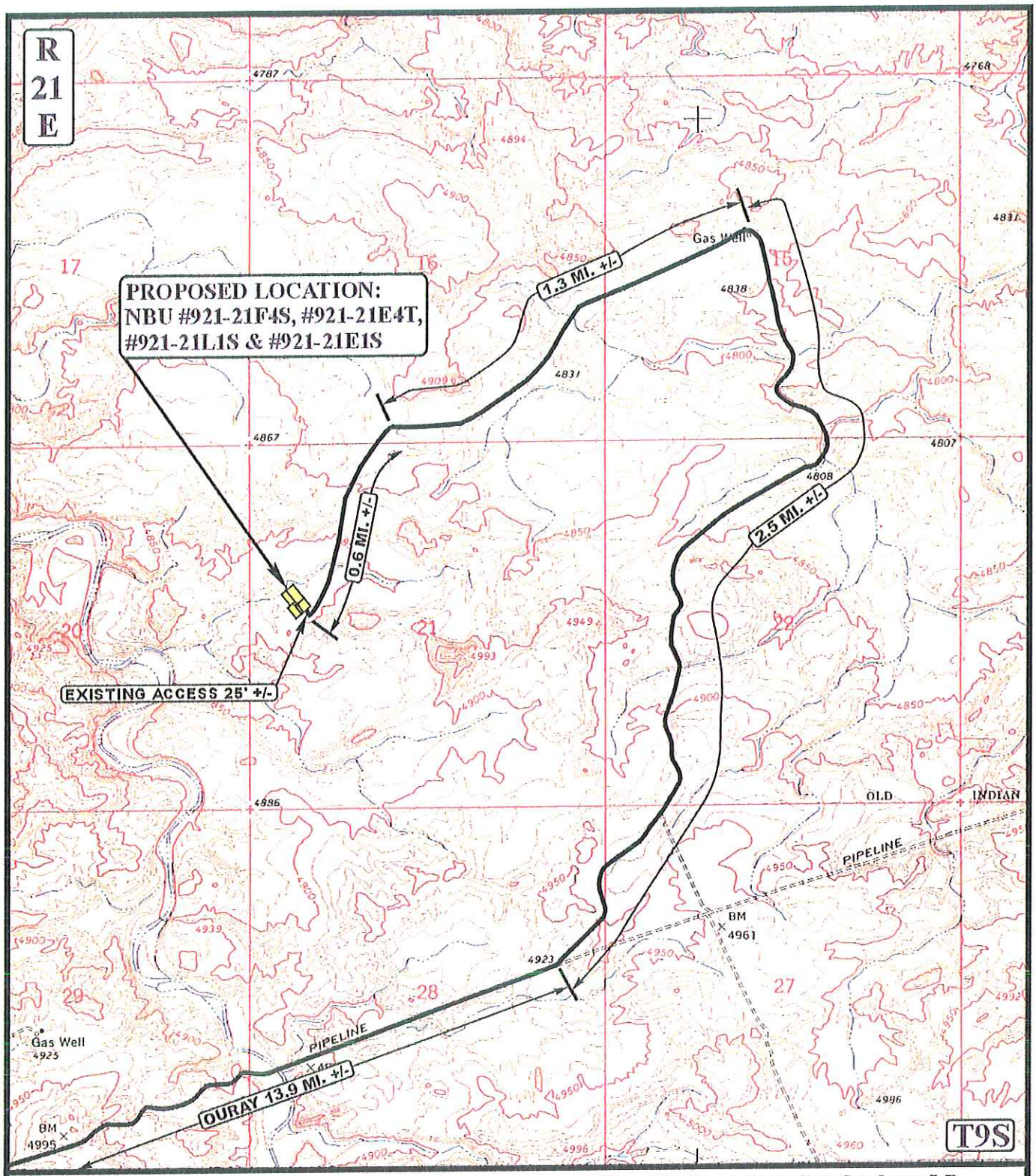
NBU #921-21F4S, #921-21E4T, #921-21L1S & #921-21E1S
SECTION 21, T9S, R21E, S.L.B.&M.
SW 1/4 NW 1/4

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP | 06 MONTH | 30 DAY | 08 YEAR | A TOPO

SCALE: 1:100,000 | DRAWN BY: J.J. | REVISED: 00-00-00

API Well No: 43047501010000



LEGEND:

EXISTING ROAD

PROPOSED ACCESS ROAD

N

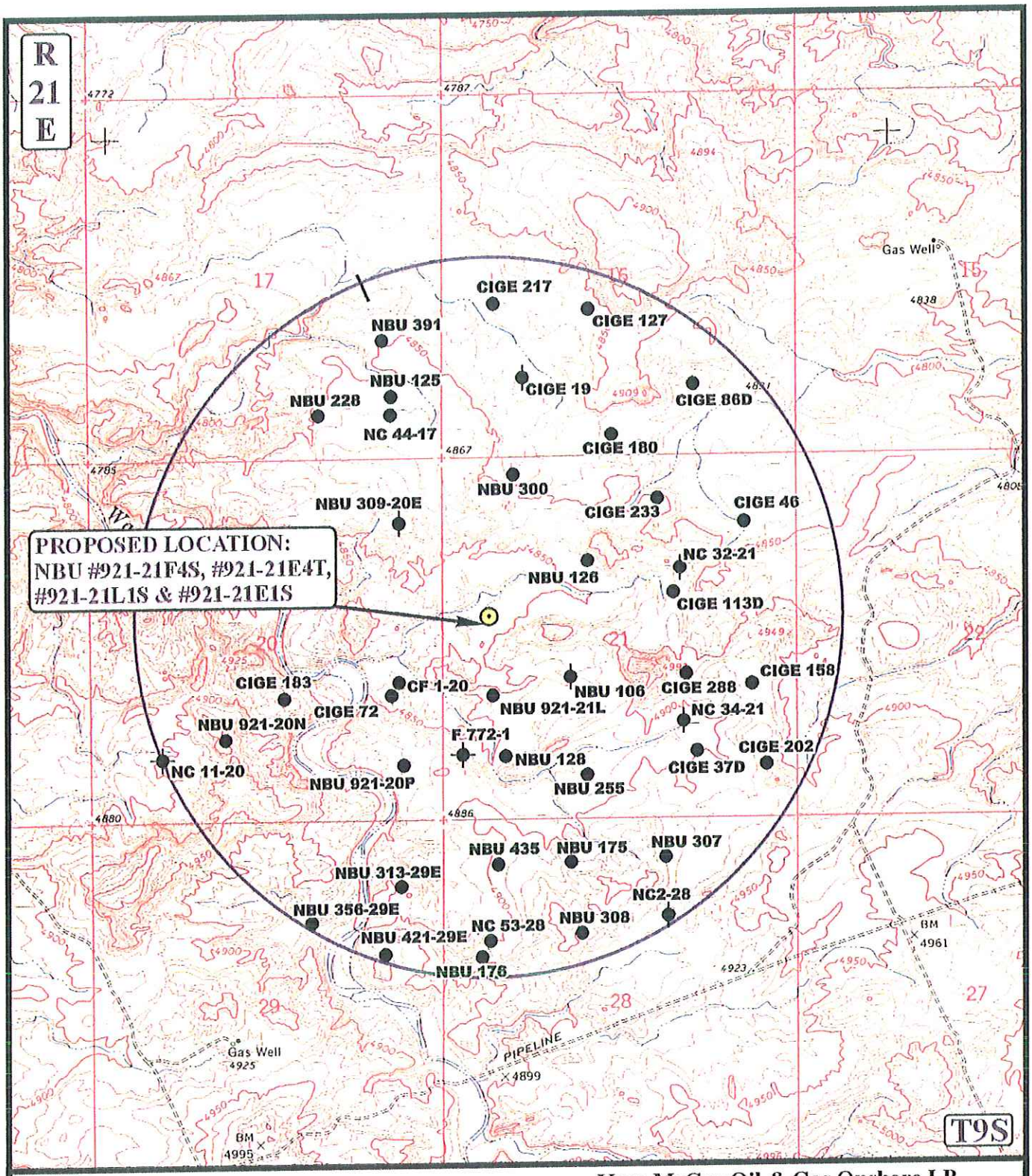
Kerr-McGee Oil & Gas Onshore LP

NBU #921-21F4S, #921-21E4T, #921-21L1S & #921-21E1S
SECTION 21, T9S, R21E, S.L.B.&M.
SW 1/4 NW 1/4

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	06 MONTH	30 DAY	08 YEAR	B TOPO
SCALE: 1" = 2000'	DRAWN BY: J.J.	REVISED: 00-00-00		

API Well No: 43047501010000



LEGEND:

- DISPOSAL WELLS
- PRODUCING WELLS
- SHUT IN WELLS
- WATER WELLS
- ABANDONED WELLS
- TEMPORARILY ABANDONED

N

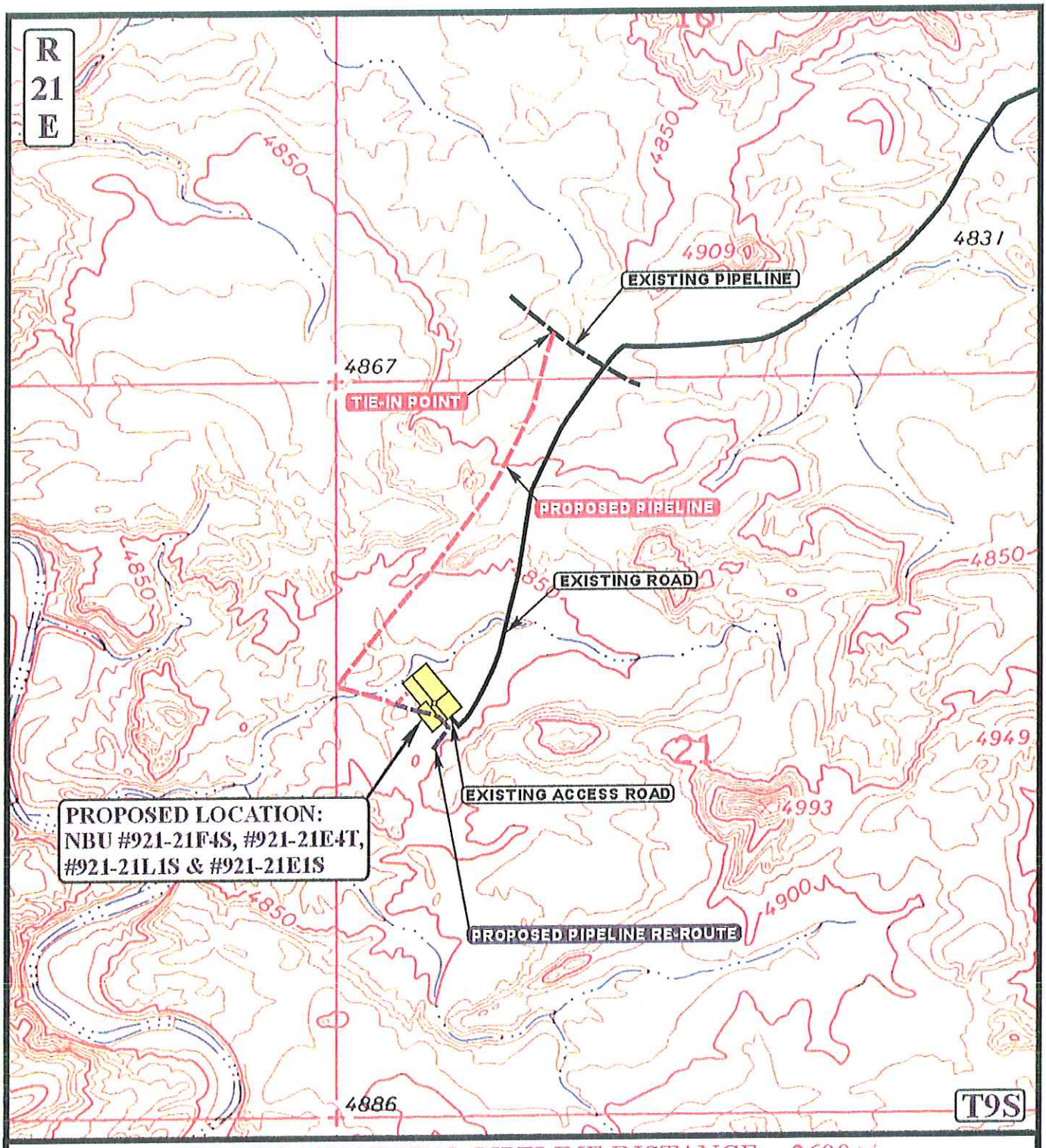
Kerr-McGee Oil & Gas Onshore LP

NBU #921-21F4S, #921-21E4T, #921-21L1S & #921-21E1S
SECTION 21, T9S, R21E, S.L.B.&M.
SW 1/4 NW 1/4

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	06 MONTH	30 DAY	08 YEAR	C TOPO
SCALE: 1" = 2000'	DRAWN BY: J.J.	REVISED: 00-00-00		

API Well No: 43047501010000



APPROXIMATE TOTAL PIPELINE DISTANCE = 2600+/-

LEGEND:

EXISTING ROAD
EXISTING PIPELINE
PROPOSED PIPELINE RE-ROUTE
PROPOSED PIPELINE

N

Kerr-McGee Oil & Gas Onshore LP

NBU #921-21F4S, #921-21E4T, #921-21L1S & #921-21E1S
SECTION 21, T9S, R21E, S.L.B.&M.
SW 1/4 NW 1/4

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	06 MONTH	30 DAY	08 YEAR	D TOPO
SCALE: 1" = 1000'	DRAWN BY: J.J.	REVISED: 00-00-00		

API Well No: 43047501010000

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:
3160
(UT-922)

September 9, 2008

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2008 Plan of Development Natural Buttes Unit Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2008 within the Natural Buttes Unit, Uintah County, Utah.

API #	WELL NAME	LOCATION
(Proposed PZ Wasatch/MesaVerde)		
43-047-50100	NBU 921-21E1S	Sec 21 T09S R21E 2282 FNL 0670 FWL BHL Sec 21 T09S R21E 1654 FNL 0674 FWL
43-047-50101	NBU 921-21L1S	Sec 21 T09S R21E 2298 FNL 0683 FWL BHL Sec 21 T09S R21E 2434 FSL 0674 FWL
43-047-50102	NBU 921-27J4S	Sec 27 T09S R21E 1390 FSL 1310 FEL BHL Sec 27 T09S R21E 1680 FSL 1410 FEL
43-047-50103	NBU 921-27J1S	Sec 27 T09S R21E 1387 FSL 1290 FEL BHL Sec 27 T09S R21E 2175 FSL 1410 FEL
43-047-50104	NBU 921-21F4S	Sec 21 T09S R21E 2329 FNL 0708 FWL BHL Sec 21 T09S R21E 2350 FNL 2535 FWL
43-047-50105	NBU 921-9E2S	Sec 08 T09S R21E 0966 FNL 0602 FEL BHL Sec 09 T09S R21E 1686 FNL 0110 FWL

This office has no objection to permitting the wells at this time.

/s/ Michael L. Coulthard

API Well No: 43047501010000

bcc: File – Natural Buttes Unit
Division of Oil Gas and Mining
Central Files
Agr. Sec. Chron
Fluid Chron

MCoulthard:mc:9-9-08

API Well No: 43047501010000

Kerr-McGee Oil & Gas Onshore LP
1999 Broadway, Suite 3700
Denver, CO 80205

September 9, 2008

Mrs. Diana Mason
Division of Oil, Gas and Mining
P.O. Box 145801
Salt Lake City, UT 84114-6100

Re: Directional Drilling R649-3-11
NBU 921-21L1S
T9S-R21E
Section 21: SWNW/NWSW
Surface: 2298' FNL, 683' FWL
Bottom Hole: 2434' FSL, 674' FWL
Uintah County, Utah

Dear Mrs. Mason:

Pursuant to the filing of Kerr-McGee Oil & Gas Onshore LP's (Kerr-McGee) Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- Kerr-McGee's NBU 921-21L1S is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

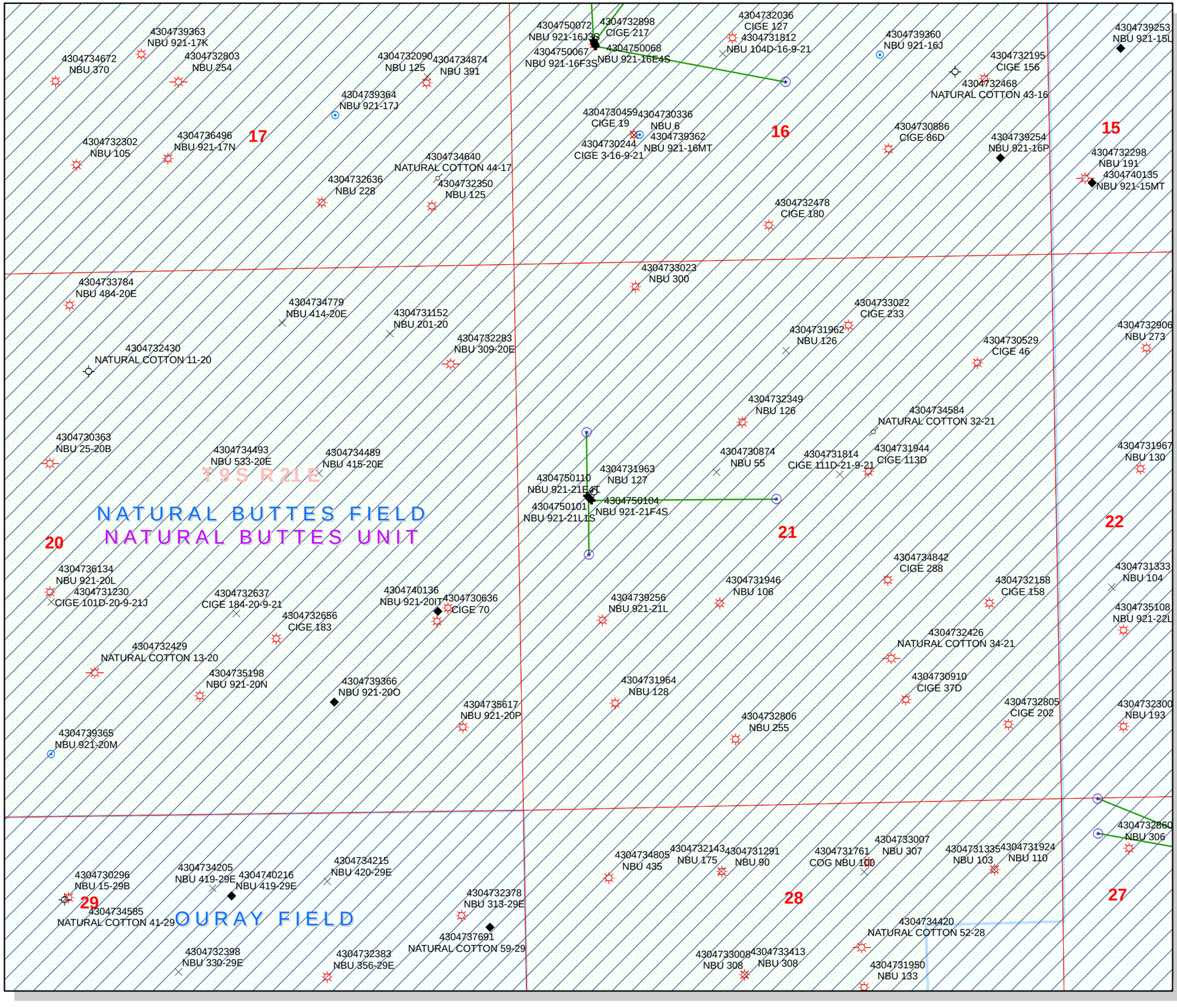
Therefore, based on the above stated information Kerr-McGee Oil & Gas Onshore LP requests the permit be granted pursuant to R649-3-11.

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

Jason K. Rayburn
Landman

RECEIVED
SEP 10 2008
DIV. OF OIL, GAS & MINING



API Number: 4304750101

Well Name: NBU 921-21L1S

Township 09.0 S Range 21.0 E Section 21

Meridian: SLBM

Operator: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Map Prepared:
Map Produced by Diana Mason

Units

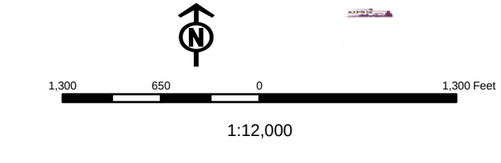
STATUS
- ACTIVE
- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

Fields

STATUS
- ACTIVE
- COMBINED
- Sections
- Township

Wells Query Events
- <all other values>

GIS_STAT_TYPE
- <Null>
- APD
- DRL
- GI
- GS
- LA
- NEW
- OPS
- PA
- PGW
- POW
- RET
- SGW
- SOW
- TA
- TW
- WD
- WI
- WS
- Bottom Hole Location



1:12,000

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 9/8/2008 **API NO. ASSIGNED:** 43047501010000

WELL NAME: NBU 921-21L1S

OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. (N2995) **PHONE NUMBER:** 720 929-6226

CONTACT: Kevin McIntyre

PROPOSED LOCATION: SWNW 21 090S 210E **Permit Tech Review:** ☑

SURFACE: 2298 FNL 0683 FWL **Engineering Review:** ☐

BOTTOM: 2434 FSL 0674 FWL **Geology Review:** ☑

COUNTY: UINTAH

LATITUDE: 40.02248 **LONGITUDE:** -109.56302

UTM SURF EASTINGS: 622625.00 **NORTHINGS:** 4431032.00

FIELD NAME: NATURAL BUTTES

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-0576 **PROPOSED FORMATION:** WSMVD

SURFACE OWNER: 2 - Indian **COALBED METHANE:** NO

RECEIVED AND/OR REVIEWED:

- ☑ **PLAT**
- ☑ **Bond:** FEDERAL - WYB000291
- ☐ **Potash**
- ☑ **Oil Shale 190-5**
- ☐ **Oil Shale 190-3**
- ☐ **Oil Shale 190-13**
- ☑ **Water Permit:** Permit #43-8496
- ☐ **RDCC Review:**
- ☐ **Fee Surface Agreement**
- ☐ **Intent to Commingle**

LOCATION AND SITING:

- ☐ **R649-2-3.**

  Unit:
- ☐ **R649-3-2. General**
- ☐ **R649-3-3. Exception**
- ☑ **Drilling Unit**

  Board Cause No: 173-14

  Effective Date: 12/2/1999

  Siting: 460' fr u bdry & uncomm. tract
- ☐ **R649-3-11. Directional Drill**

Comments: Presite Completed

Stipulations: 4 - Federal Approval - dmason
17 - Oil Shale 190-5(b) - dmason

JON M. HUNTSMAN, JR.
Governor
GARY R. HERBERT
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

Permit To Drill

****

Well Name: NBU 921-21L1S
API Well Number: 43047501010000
Lease Number: UTU-0576
Surface Owner: INDIAN
Approval Date: 9/22/2008

Issued to:
KERR-MCGEE OIL & GAS ONSHORE, L.P. , P.O. Box 173779, Denver, CO 80217

Authority:
Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of CAUSE: 173-14.

Duration:
This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

General:
Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:
State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with the Order in Cause No. 190-5(b) dated October 28, 1982, the operator shall comply with the requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operators shall ensure that the surface and or production casing is properly cemented over the entire oil shale section as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the division.

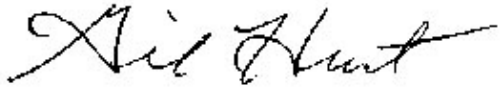
Notification Requirements:
Notify the Division with 24 hours of spudding the well.
- Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.
- Contact Dustin Doucet at (801) 538-5281 office (801) 733-0983 home

API Well No: 43047501010000

Reporting Requirements:
All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

Approved By:



Gil Hunt
Associate Director, Oil & Gas

API Well No: 43047501010000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0576

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 921-21L1S

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047501010000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6007 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2298 FNL 0683 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 21 Township: 09.0S Range: 21.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 9/14/2009	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DRILLING REPORT Report Date:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	✓ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions and/or comments. Thank you.

Approved by the Utah Division of Oil, Gas and Mining

Date: September 14, 2009

By:

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Danielle Piernot	720 929-6156	Regulatory Analyst
SIGNATURE N/A		**DATE** 9/10/2009

RECEIVED September 10, 2009

The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047501010000

API: 43047501010000
Well Name: NBU 921-21L1S
Location: 2298 FNL 0683 FWL QTR SWNW SEC 21 TWNP 090S RNG 210E MER S
Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.
Date Original Permit Issued: 9/22/2008

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- **If located on private land, has the ownership changed, if so, has the surface agreement been updated?** ○ **Yes** ◉ **No**
- **Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?** ○ **Yes** ◉ **No**
- **Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?** ○ **Yes** ◉ **No**
- **Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?** ○ **Yes** ◉ **No**
- **Has the approved source of water for drilling changed?** ○ **Yes** ◉ **No**
- **Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?** ○ **Yes** ◉ **No**
- **Is bonding still in place, which covers this proposed well?** ◉ **Yes** ○ **No**

Approved by the Utah Division of Oil, Gas and Mining

Signature: Danielle Piernot **Date:** 9/10/2009
Title: Regulatory Analyst **Representing:** KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date: September 14, 2009

By: 

RECEIVED September 10, 2009

API Well No: 43047501010000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0576

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 921-21L1S

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047501010000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6007 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2298 FNL 0683 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 21 Township: 09.0S Range: 21.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 9/20/2010	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SPUD REPORT Date of Spud:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ DRILLING REPORT Report Date:	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	✓ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions and/or comments. Thank you.

Approved by the Utah Division of Oil, Gas and Mining

Date: September 28, 2010

By:

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Danielle Piernot	720 929-6156	Regulatory Analyst
SIGNATURE		**DATE**
N/A		9/20/2010

RECEIVED September 20, 2010

The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047501010000

API: 43047501010000
Well Name: NBU 921-21L1S
Location: 2298 FNL 0683 FWL QTR SWNW SEC 21 TWNP 090S RNG 210E MER S
Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.
Date Original Permit Issued: 9/22/2008

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- **If located on private land, has the ownership changed, if so, has the surface agreement been updated?** ○ **Yes** ◉ **No**
- **Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?** ○ **Yes** ◉ **No**
- **Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?** ○ **Yes** ◉ **No**
- **Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?** ○ **Yes** ◉ **No**
- **Has the approved source of water for drilling changed?** ○ **Yes** ◉ **No**
- **Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?** ○ **Yes** ◉ **No**
- **Is bonding still in place, which covers this proposed well?** ◉ **Yes** ○ **No**

Approved by the Utah Division of Oil, Gas and Mining

Signature: Danielle Piernot **Date:** 9/20/2010
Title: Regulatory Analyst **Representing:** KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date: September 28, 2010

By: 

RECEIVED September 20, 2010

Form 3160-3
(August 2007)

FORM APPROVED
OMB No. 1004-0137
Expires July 31, 2010

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
VERNAL FIELD OFFICE
2011 JUL 19 P 1:51
DEPT OF THE INTERIOR
BUREAU OF LAND MGMT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
UTU-0576

6. If Indian, Allotee or Tribe Name
Ute

1a. Type of work: ☑ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.
891008900A

1b. Type of Well: ☐ Oil Well ☑ Gas Well ☐ Other ☐ Single Zone ☑ Multiple Zone

8. Lease Name and Well No.
NBU 921-21L1S

2. Name of Operator
Kerr-McGee Oil & Gas Onshore, LP

9. API Well No.
43 047 50101

3a. Address
P.O. Box 173779, Denver, CO 80217-3779

3b. Phone No. *(include area code)*
720.929.6226

10. Field and Pool, or Exploratory
Natural Buttes Field

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface SWNW 2298' FNL & 683' FWL LAT 40.022561 LON -109.563064 (NAD 27)
At proposed prod. zone NWSW 2434' FSL & 674' FWL, Sec. 21, T 9S, R 21E

11. Sec., T. R. M. or Blk. and Survey or Area
Sec. 21, T 9S, R 21E

14. Distance in miles and direction from nearest town or post office*
18.3 miles northeast of Ouray, Utah

12. County or Parish
Uintah

13. State
UT

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 674'	16. No. of acres in lease 1480	17. Spacing Unit dedicated to this well Unit Well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 20'	19. Proposed Depth 10,135'	20. BLM/BIA Bond No. on file WYB000291
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 4,838' GL	22. Approximate date work will start*	23. Estimated duration 10 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, must be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the BLM.

25. Signature	Name *(Printed Typed)* Kevin McIntyre	Date 09/08/2008

Title
Regualtory Analyst I

Approved by *(Signature)*	Name *(Printed Typed)* Jerry Kenczka	Date JUL 29 2011
Title Assistant Field Manager Lands & Mineral Resources	Office VERNAL FIELD OFFICE	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

CONDITIONS OF APPROVAL ATTACHED

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

*(Instructions on page 2)

NOTICE OF APPROVAL

UDOGM

RECEIVED
AUG 03 2011
DIV. OF OIL, GAS & MINING

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VERNAL FIELD OFFICE
170 South 500 East VERNAL, UT 84078 (435) 781-4400

CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company:	**Kerr McGee Oil & Gas Onshore, LP**	**Location:**	**SWNW, Sec. 21, T9S, R21E (S)** **NWSW, Sec. 21, T9S, R21E (B)**
Well No:	**NBU 921-21L1S**	**Lease No:**	**UTU-0576**
API No:	**43-047-50501** 50101	**Agreement:**	**Natural Buttes Unit**

OFFICE NUMBER: (435) 781-4400
OFFICE FAX NUMBER: (435) 781-3420

A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

NOTIFICATION REQUIREMENTS

Construction Activity (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	-	The Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist shall be notified at least 48 hours in advance of any construction activity. The Ute Tribal office is open Monday through Thursday.
Construction Completion (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	-	Upon completion of the pertinent APD/ROW construction, notify the Ute Tribe Energy & Minerals Dept. for a Tribal Technician to verify the Affidavit of Completion. Notify the BLM Environmental Scientist prior to moving on the drilling rig.
Spud Notice (Notify BLM Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify BLM Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings to: ut_vn_opreport@blm.gov.
BOP & Related Equipment Tests (Notify BLM Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify BLM Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

SURFACE USE PROGRAM
CONDITIONS OF APPROVAL (COAs)

Site-Specific Conditions of Approval:

- Paint all facilities "Shadow Gray."
- Monitor by a permitted paleontologist during construction operations.
- Construct diversion drainages around the west side of the well pad.
- In accordance with the guidelines specified in the Utah BLM Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances, 2002, a raptor survey should be conducted prior to construction of the proposed location, pipeline, or access road if construction will take place during raptor nesting season (January 1 through September 30) and conduct its operations according to specifications in the guidelines.
- If project construction operations are not initiated before June 17, 2010, KMG shall conduct additional biological surveys in accordance with the guidelines specified in the USFWS Rare Plant Conservation Measures for Uinta Basin hookless cactus (See Appendix D) and conduct its operation according to its specifications.

BIA Standard Conditions of Approval:

- Soil erosion will be mitigated by reseeding all disturbed areas.
- The gathering pipelines will be constructed to lie on the surface. The surface pipelines will not be bladed or cleared of vegetation. Where pipelines are constructed parallel to roads they may be welded on the road and then lifted from the road onto the right-of-way. Where pipelines do not parallel roads but cross-country between sites, they shall be welded in place at well sites or on access roads and then pulled between stations with a suitable piece of equipment. Traffic will be restricted along these areas so that the pipeline right-of-way will not be used as an access road.
- An open drilling system shall be used, unless otherwise specified in 10.0 Additional Stipulations of this document and in the Application for Permit to Drill. A closed drilling system shall be used in all flood plain areas, and other highly sensitive areas, recommended by the Ute Tribe Technician, BIA, and other agencies involved.
- The reserve pit shall be lined with a synthetic leak proof liner. After the drilling operation is complete, excess fluids shall be removed from the reserve pit and either hauled to an approved disposal site or shall be used to drill other wells. When the fluids are removed the pit shall be backfilled a minimum of 3.0' below the soil surface elevation.
- A closed production system shall be used. This means all produced water and oil field fluid wastes shall be contained in leak proof tanks. These fluids shall be disposed of in either approved injection wells or disposal pits.
- Major low water crossings will be armored with pit run material to protect them from erosion.
- All personnel shall refrain from collecting any paleontological fossils and from disturbing any fossil resources in the area.
- If fossils are exposed or identified during construction, all construction must cease and immediate notification to the Energy and Minerals Department and the Cultural Rights Protection Officer.

- Before the site is abandoned the company will be required to restore the right-of-way to near its original state. The disturbed area will be reseeded with desirable perennial vegetation. If necessary, the Bureau of Indian Affairs or Bureau of Land Management will provide a suitable seed mixture.
- Noxious weeds will be controlled on all surface disturbances within the project area. If noxious weeds spread from the project area onto adjoining land, the company will also be responsible for their control.
- If project construction operations are scheduled to occur after December 31, 2009, KMG shall conduct annual raptor surveys in accordance with the guidelines specified in the Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances, 2002 (See Appendix E) and conduct its operations according to applicable seasonal restrictions and spatial offsets.
- USFWS threatened and endangered plant and animal conservation measures will be followed, as appropriate to the species identified by the biological resource survey (See Appendix E).
- All personnel shall refrain from collecting artifacts and from disturbing any significant cultural resources in the area.
- If artifacts or any culturally sensitive materials are exposed or identified during construction, all construction must cease and immediate notification to the Energy and Minerals Department and the Cultural Rights Protection Officer.

DOWNHOLE PROGRAM
CONDITIONS OF APPROVAL (COAs)

SITE SPECIFIC DOWNHOLE COAs:

- Surface casing cement shall be brought up and into the surface. Top of Cmnt is to reach surf. For the surface casing cementing program (operator's specified option 1, where well does not circulate water) operator is required to pump additional cement beyond the stated amounts in application.
- Production casing cement shall be brought up and into the surface casing. Production casing minimum cement top is 1600 ft. The minimum cement top is approximately 0700 ft above the surface casing shoe.
  Cmnt Top (TOC) standard will place cmnt behind casing across formation lost circulation zone, Birds Nest Zone.
  COA specification fulfills operators performance standard stated in APD (where operators toc is calc'd with an excess to reach surface).
- Operator is to notify BLM Vernal Field Office and active gilsonite mining operator (or lease holder) located within a 2 mile radius, 48 hours prior to pad explosives blasting. Well is not close to gilsonite vein, but on trend to gilisonite vein deposits.
- A copy of Kerr McGee's Standard Operating Practices (SOP version: dated 7/17/08 and approved 7/28/08) shall be on location.
- Drilling plan specifics and practices are referenced in the Kerr McGee Oil & Gas Standard Operating Procedures (SOP version: July 28, 2008). The operators drilling plan items 3 to 9 reference the SOP. Kerr McGee shall adhere to the referenced requirements in the SOP. Kerr McGee and their contractors shall adhere to all Oil and Gas rules and requirements listed in the Code of Federal Regulations and all Federal Onshore Oil and Gas Orders except where variances have been granted.
- Covering air/gas drilling operations, requirements will be adhered to covering air/gas drilling operations as described in Onshore Order #2 III. E. 1. Drilling Operations, Special Drilling Operations, air/gas drilling.
- A Gamma Ray well Log shall be run from the well Total Depth to the surface.
  A copy of the Gamma Ray well Log shall be submitted to the BLM Vernal Field Office.
  A copy of the directional survey shall be submitted to the BLM Vernal Field Office.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.

- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.

- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.

- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.

- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.

- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.

- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.

- No aggressive/fresh hard-banded drill pipe shall be used within casing.

- **Cement baskets shall not be run on surface casing.**

- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.

- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.

- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.

- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

- **Please submit an electronic copy of all other logs run on this well in LAS format to UT_VN_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**

- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.

- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at www.ONRR.gov.

- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.

- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:

    - Operator name, address, and telephone number.
    - Well name and number.
    - Well location (¼¼, Sec., Twn, Rng, and P.M.).
    - Date well was placed in a producing status (date of first production for which royalty will be paid).
    - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
    - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
    - Unit agreement and/or participating area name and number, if applicable.
    - Communitization agreement number, if applicable.

- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.

- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.

- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days

after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.

- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.

- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.

- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.

- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.

- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.

- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0576

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 921-21L1S

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047501010000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6515 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2298 FNL 0683 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 21 Township: 09.0S Range: 21.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 8/22/2011	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
☐ SPUD REPORT Date of Spud:	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
☐ DRILLING REPORT Report Date:	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	✓ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions and/or comments. Thank you.

Approved by the Utah Division of Oil, Gas and Mining

Date: 08/22/2011

By:

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Andy Lytle	720 929-6100	Regulatory Analyst
SIGNATURE N/A		**DATE** 8/22/2011

RECEIVED Aug. 22, 2011

The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047501010000

API: 43047501010000
Well Name: NBU 921-21L1S
Location: 2298 FNL 0683 FWL QTR SWNW SEC 21 TWNP 090S RNG 210E MER S
Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.
Date Original Permit Issued: 9/22/2008

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- **If located on private land, has the ownership changed, if so, has the surface agreement been updated?** ○ **Yes** ◉ **No**
- **Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?** ○ **Yes** ◉ **No**
- **Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?** ○ **Yes** ◉ **No**
- **Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?** ○ **Yes** ◉ **No**
- **Has the approved source of water for drilling changed?** ○ **Yes** ◉ **No**
- **Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?** ○ **Yes** ◉ **No**
- **Is bonding still in place, which covers this proposed well?** ◉ **Yes** ○ **No**

Signature: Andy Lytle **Date:** 8/22/2011
Title: Regulatory Analyst **Representing:** KERR-MCGEE OIL & GAS ONSHORE, L.P.

RECEIVED Aug. 22, 2011

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0576

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 921-21L1S

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047501010000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6526

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2298 FNL 0683 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 21 Township: 09.0S Range: 21.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☑ SPUD REPORT Date of Spud: 2/27/2012	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DRILLING REPORT Report Date:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

MIRU TRIPPLE A BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'. RAN 14" 36.7# SCHEDULE 10 PIPE. CMT W/28 SX READY MIX. SPUD WELL ON 02/27/2012 AT 1500 HRS.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
March 06, 2012

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Sheila Wopsock	435 781-7024	Regulatory Analyst
SIGNATURE		**DATE**
N/A		3/1/2012

RECEIVED: Mar. 01, 2012

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER:
UTU-0576

SUNDRY NOTICES AND REPORTS ON WELLS

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6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Ute

7.UNIT or CA AGREEMENT NAME:
NATURAL BUTTES

1. TYPE OF WELL
Gas Well

8. WELL NAME and NUMBER:
NBU 921-21L1S

2. NAME OF OPERATOR:
KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER:
43047501010000

3. ADDRESS OF OPERATOR:
P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER:
720 929-6526

9. FIELD and POOL or WILDCAT:
NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
2298 FNL 0683 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: SWNW Section: 21 Township: 09.0S Range: 21.0E Meridian: S

COUNTY:
UINTAH

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
✓ DRILLING REPORT Report Date: 3/11/2012	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

MIRU AIR RIG ON MARCH 9, 2012. DRILLED SURFACE HOLE TO 2,865'. RAN SURFACE CASING AND CEMENTED. WELL IS WAITING ON ROTARY RIG. DETAILS OF CEMENT JOB WILL BE INCLUDED WITH WELL COMPLETION REPORT.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
March 15, 2012

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Jaime Scharnowske	720 929-6304	Regulartory Analyst
SIGNATURE		**DATE**
N/A		3/12/2012

RECEIVED: Mar. 12, 2012

Sundry Number: 24011 API Well Number: 43047501010000

FEDERAL APPROVAL OF THIS ACTION IS NECESSARY

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER:
UTU-0576

SUNDRY NOTICES AND REPORTS ON WELLS

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6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Ute

7.UNIT or CA AGREEMENT NAME:
NATURAL BUTTES

1. TYPE OF WELL
Gas Well

8. WELL NAME and NUMBER:
NBU 921-21L1S

2. NAME OF OPERATOR:
KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER:
43047501010000

3. ADDRESS OF OPERATOR:
P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER:
720 929-6515

9. FIELD and POOL or WILDCAT:
NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
2298 FNL 0683 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: SWNW Section: 21 Township: 09.0S Range: 21.0E Meridian: S

COUNTY:
UINTAH

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 3/19/2012	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	✓ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The operator requests approval for changes in the drilling plan. Specifically, the Operator requests approval for a FIT waiver, a closed loop drilling option and a production casing change. All other aspects of the previously approved drilling plan will not change. Please see the attachment. Thank you.

Accepted by the Utah Division of Oil, Gas and Mining

Date: March 20, 2012

By: Dark K Quist

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Jaime Scharnowske	720 929-6304	Regulartory Analyst

SIGNATURE	DATE
N/A	3/19/2012

RECEIVED: Mar. 19, 2012

Kerr-McGee Oil & Gas Onshore. L.P.

NBU 921-21L1S

Surface:	2298 FNL / 683 FWL	SWNW
BHL:	2434 FSL / 674 FWL	NWSW

Section 21 T9S R21E

Uintah County, Utah
Mineral Lease: UTU-0576

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. & 2. **Estimated Tops of Important Geologic Markers:**
Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

Formation	Depth	Resource
Uinta	0 - Surface	
Green River	1,601'	
Birds Nest	1,914'	Water
Mahogany	2,394'	Water
Wasatch	4,948'	Gas
Mesaverde	7,908'	Gas
Sego	10,154'	Gas
TVD	10,154'	
TD	10,202'	

3. **Pressure Control Equipment** (Schematic Attached)

Please refer to the attached Drilling Program

4. **Proposed Casing & Cementing Program:**

Please refer to the attached Drilling Program

5. **Drilling Fluids Program:**

Please refer to the attached Drilling Program

6. **Evaluation Program:**

Please refer to the attached Drilling Program

RECEIVED: Mar. 19, 2012

7. Abnormal Conditions:

Maximum anticipated bottom hole pressure calculated at 10154' TVD, approximately equals 6,499 psi 0.64 psi/ft = actual bottomhole gradient

Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

Maximum anticipated surface pressure equals approximately 4,250 psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

Per Onshore Order No. 2 - Max Anticipated Surf. Press.(MASP) = (Pore Pressure at next csg point-
(0.22 psi/ft-partial evac gradient x TVD of next csg point))

8. Anticipated Starting Dates:

Drilling is planned to commence immediately upon approval of this application.

9. Variances:

Please refer to the attached Drilling Program.
Onshore Order #2 – Air Drilling Variance

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- Blowout Prevention Equipment (BOPE) requirements;
- Mud program requirements; and
- Special drilling operation (surface equipment placement) requirements associated with air drilling.

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

Background

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

RECEIVED: Mar. 19, 2012

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12 1/4 inch hole for the first 200 feet, then will drill a 11inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 11 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 8-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

Variance for BOPE Requirements
The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

Variance for Mud Material Requirements
Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements
Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and

on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

Variance for FIT Requirements
KMG also respectfully requests a variance to Onshore Order 2, Section III, Part Bi, for the pressure integrity test (PIT, also known as a formation integrity test (FIT)). This well is not an exploratory well and is being drilled in an area where the formation integrity is well known. Additionally, when an FIT is run with the mud weight as required, the casing shoe frequently breaks down and causes subsequent lost circulation when drilling the entire depth of the well.

Conclusion
The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

10. Other Information:

Please refer to the attached Drilling Program.

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP		DATE	March 19, 2012	
WELL NAME	**NBU 921-21L1S**		TD	10,154' TVD	10,202' MD
FIELD	Natural Buttes	COUNTY Uintah	STATE Utah	FINISHED ELEVATION	4,838'
SURFACE LOCATION	SWNW	2298 FNL	683 FWL	Sec 21 T 9S	R 21E
	Latitude:	40.022561	Longitude:	-109.563033	NAD 83
BTM HOLE LOCATION	NWSW	2434 FSL	674 FWL	Sec 21 T 9S	R 21E
	Latitude:	40.021014	Longitude:	-109.563064	NAD 83
OBJECTIVE ZONE(S)	Wasatch/Mesaverde				
ADDITIONAL INFO	Regulatory Agencies: BLM (Minerals), BIA (Surface), UDOGM Tri-County Health Dept.				

GEOLOGICAL			MECHANICAL		
LOGS	FORMATION TOPS	DEPTH	HOLE SIZE	CASING SIZE	MUD WEIGHT
		40'		14"	
		200'	12-1/4	8-5/8", 28#, IJ-55, LTC	Air mist
			11'	8-5/8", 28#, IJ-55, LTC	Air mist

All water flows encountered while drilling will be reported to the appropriate agencies.

Green River @	**1,601'**
Top of Birds Nest @	**1,914'**
Mahogany @	**2,394'**
Preset f/ GL @ 2,840' TVD	

Note: 11" surface hole will usually be drilled ±400' below the lost circulation zone (aka bird's nest). Drilled depth may be ±200' of the estimated set depth depending on the acutal depth of the loss zone.

Wasatch @	**4,948'**

Mud logging program TBD
Cased hole logging program from TD - surf csg

Mverde @	**7,908' TVD**
Sego @	**10,154' TVD**

	7-7/8"	4-1/2" 11.6# I-80 Ultra DQX HCP-110 LTC	Water / Fresh Water Mud 8.3-12.5 ppg

Max anticipated Mud required 12.5 ppg

TD @ 10,154' TVD 10,202' MD

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL			WT.	GR.	CPLG.	DESIGN FACTORS BURST	COLLAPSE	LTC	DQX TENSION
CONDUCTOR	14"	0-40'									
								3,390	1,880	348,000	N/A
SURFACE	8-5/8"	0	to	2,840	28.00	IJ-55	LTC	1.90	1.41	5.00	N/A
								7,780	6,350	223,000	267,035
PRODUCTION	4-1/2"	0	to	5,000	11.60	I-80	DQX	1.11	0.96		2.79
								10,690	8,650	279,000	367,174
	4-1/2"	5,000	to	10,202'	11.60	HCP-110	LTC	1.53	1.31	4.57	3.84

Surface Casing:

(Burst Assumptions: TD = 12.5 ppg) 0.73 psi/ft = frac gradient @ surface shoe

Fracture at surface shoe with 0.1 psi/ft gas gradient above

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

Production casing:

(Burst Assumptions: Pressure test with 8.4ppg @ 7000 psi) 0.64 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT		YIELD
SURFACE	LEAD	500'	Premium cmt + 2% CaCl	180	60%	15.80		1.15
Option 1			+ 0.25 pps flocele					
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80		1.15
			+ 2% CaCl + 0.25 pps flocele					
SURFACE			**NOTE: If well will circulate water to surface, option 2 will be utilized**					
Option 2	LEAD	2,340'	65/35 Poz + 6% Gel + 10 pps gilsonite	220	35%	11.00		3.82
			+ 0.25 pps Flocele + 3% salt BWOW					
	TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80		1.15
			+ 0.25 pps flocele					
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80		1.15
PRODUCTION	LEAD	4,442'	Premium Lite II +0.25 pps	350	35%	12.00		3.38
			celloflake + 5 pps gilsonite + 10% gel					
			+ 0.5% extender					
	TAIL	5,760'	50/50 Poz/G + 10% salt + 2% gel	1,360	35%	14.30		1.31
			+ 0.1% R-3					

*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe
PRODUCTION	Float shoe, 1 jt, float collar. 15 centralizers for a Mesaverde and 20 for a Blackhawk well. 1 centralizer on the first 3 joints and one every third joint thereafter.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Surveys will be taken at 1,000' minimum intervals.

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER: _____ **DATE:** _____

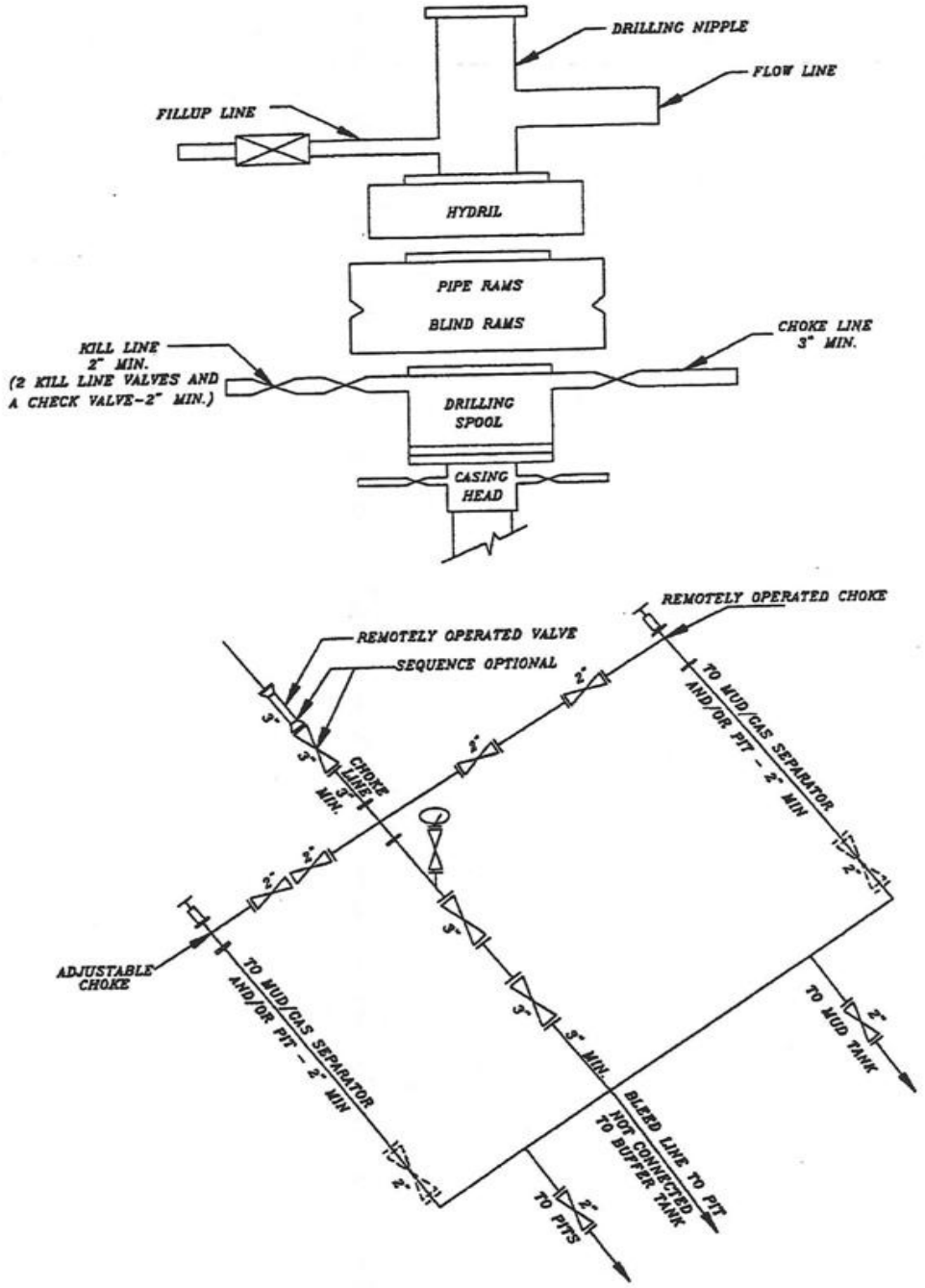
Nick Spence / Danny Showers / Chad Loesel

DRILLING SUPERINTENDENT: _____ **DATE:** _____

Kenny Gathings / Lovel Young

RECEIVED: Mar. 19, 2012

EXHIBIT A
NBU 921-21L1S



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

RECEIVED: Mar. 19, 2012

Requested Drilling Options:

Kerr-McGee will use either a closed loop drilling system that will require one pit and one cuttings storage area to be constructed on the drilling pad or a traditional drilling operation with one pit used for drilling and completion operations. The cuttings storage area will be used to contain only the de-watered drill cuttings and will be lined and bermed to prevent any liquid runoff. The drill cuttings will be buried in the completion pit once completion operations are completed according to traditional pit closure standards. The pit will be constructed to allow for completion operations. The completion operations pit will be lined with a synthetic material 20 mil or thicker and will be used for the completing of the wells on the pad or used as part of our Aandarko Completions Transportation System (ACTS). Using the closed loop drilling system will allow Kerr-McGee to decrease the amount of disturbance/footprint on location compared to a single large drilling/completions pit.

If Kerr-McGee does not use a closed loop drilling system, it will construct a traditional drilling/completions pit to contain drill cuttings and for use in completion operations. The pit will be lined with a synthetic material 20 mil or thicker. The drill cuttings will be buried in the pit using traditional pit closure standards.

RECEIVED: Mar. 19, 2012

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 6

ENTITY ACTION FORM

Operator: KERR McGEE OIL & GAS ONSHORE LP
Operator Account Number: N 2995
Address: 1368 SOUTH 1200 EAST
city VERNAL
state UT zip 84078
Phone Number: (435) 781-7024

Well 1

C

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750104	NBU 921-21F4S		SWNW	21	9S	21E	UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
	99999	2900	2/27/2012			3/20/2012	

Comments: MIRU TRIPPLE A BUCKET RIG. WSMVD
SPUD WELL ON 02/27/2012 AT 0900 HRS.

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750110	NBU 921-21E4T		SWNW	21	9S	21E	UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
B	99999	2900	2/27/2012			3/20/2012	

Comments: MIRU TRIPPLE A BUCKET RIG.
SPUD WELL ON 02/27/2012 AT 1200 HRS.
WSMVD

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750101	NBU 921-21L1S		SWNW	21	9S	21E	UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
B	99999	2900	2/27/2012			3/20/2012	

Comments: MIRU TRIPPLE A BUCKET RIG.
SPUD WELL ON 02/27/2012 AT 1500 HRS. BHL NWSW
WSMVD

ACTION CODES:

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

SHEILA WOPSOCK
Name (Please Print)
Signature
REGULATORY ANALYST
Title
3/1/2012
Date

RECEIVED
MAR 01 2012
Div. of Oil, Gas & Mining

(5/2000)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0576

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 921-21L1S

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047501010000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 **PHONE NUMBER:** 720 929-6526

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2298 FNL 0683 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 21 Township: 09.0S Range: 21.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
✓ DRILLING REPORT Report Date: 5/23/2012	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

MIRU ROTARY RIG. FINISHED DRILLING FROM 2865' TO 10200' ON 5/20/2012. RAN 4-1/2" 11.6# I-80 PRODUCTION CASING. CEMENTED PRODUCTION CASING. RELEASED H&P 298 RIG ON 5/21/2012 @ 11:30 HRS. DETAILS OF CEMENT JOB WILL BE INCLUDED WITH THE WELL COMPLETION REPORT. WELL IS WAITING ON FINAL COMPLETION ACTIVITIES.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
May 23, 2012

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Cara Mahler	720 929-6029	Regulatory Analyst I
SIGNATURE N/A		**DATE** 5/23/2012

RECEIVED: May. 23, 2012

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

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7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 921-21L1S

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047501010000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 **PHONE NUMBER:** 720 929-6515

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2298 FNL 0683 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 21 Township: 09.0S Range: 21.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

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☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☑ DRILLING REPORT Report Date: 7/6/2012	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
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	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

No activity for the month of June 2012. Well TD at 10,200'.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
July 09, 2012

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Jaime Scharnowske	720 929-6304	Regulartory Analyst
SIGNATURE N/A		**DATE** 7/6/2012

RECEIVED: Jul. 06, 2012

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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✓ DRILLING REPORT Report Date: 8/3/2012	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
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12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Started completing the well in July 2012. Well TD at 10,200'.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
August 07, 2012

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Jaime Scharnowske	720 929-6304	Regulartory Analyst
SIGNATURE N/A		**DATE** 8/3/2012

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

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SUNDRY NOTICES AND REPORTS ON WELLS

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	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

THE SUBJECT WELL WAS PLACED ON PRODUCTION ON 7/26/2012. THE CHRONOLOGICAL WELL HISTORY WILL BE SUBMITTED WITH THE WELL COMPLETION REPORT.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
August 07, 2012

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Cara Mahler	720 929-6029	Regulatory Analyst I
SIGNATURE N/A		**DATE** 8/6/2012

Form 3160-4
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No. UTU0576

1a. Type of Well ☐ Oil Well ☒ Gas Well ☐ Dry ☐ Other
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.
Other

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No. UTU63047A

2. Name of Operator KERR MCGEE OIL & GAS ONSHORE LP — Contact: CARA MAHLER — E-Mail: cara.mahler@anadarko.com

8. Lease Name and Well No. NBU 921-21L1S

3. Address 1099 18TH STREET, SUITE 1800, DENVER, CO 80202

3a. Phone No. (include area code) Ph: 720-929-6029

9. API Well No. 43-047-50101

4. Location of Well (Report location clearly and in accordance with Federal requirements)*

At surface SWNW 2298FNL 683FWL 40.020978 N Lat, 109.563753 W Lon

At top prod interval reported below NWSW 2452FSL 668FWL

At total depth NWSW 2415FSL ~~656~~ 711FWL BHL by HSM

10. Field and Pool, or Exploratory NATURAL BUTTES

11. Sec., T., R., M., or Block and Survey or Area Sec 21 T9S R21E Mer SLB

12. County or Parish UINTAH

13. State UT

14. Date Spudded 02/27/2012

15. Date T.D. Reached 05/20/2012

16. Date Completed ☐ D & A ☒ Ready to Prod. 07/26/2012

17. Elevations (DF, KB, RT, GL)* 4838 GL

18. Total Depth: MD 10201 TVD 10153

19. Plug Back T.D.: MD 10146 TVD 10098

20. Depth Bridge Plug Set: MD TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
CBGR/CCL/TEMP

22. Was well cored? ☒ No ☐ Yes (Submit analysis)
Was DST run? ☒ No ☐ Yes (Submit analysis)
Directional Survey? ☐ No ☒ Yes (Submit analysis)

23. Casing and Liner Record *(Report all strings set in well)*

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
20.000	14.000 STL	36.7	0	40		28			
11.000	8.625 J-55	28.0	0	2852		550		0	
7.875	4.500 I-80	11.6	0	10190		1634		982	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.375	9449							

25. Producing Intervals / 26. Perforation Record

	Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A)	WASATCH	6517	7961	6517 TO 7961	0.360	111	OPEN
B)	MESAVERDE	8020	9879	8020 TO 9879	0.360	162	OPEN
C)							
D)							

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
6517 TO 9879	PUMP 10,656 BBLS SLICK H2O & 257,871 LBS 30/50 OTTAWA SAND

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
07/26/2012	07/31/2012	24	→	0.0	2091.0	528.0			FLOWS FROM WELL

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
20/64	1554 SI	62.0	→	0	2091	528		PGW

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
			→					

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #148224 VERIFIED BY THE BLM WELL INFORMATION SYSTEM
**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

RECEIVED
SEP 05 2012
DIV. OF OIL, GAS & MINING

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
			→					

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
			→					

29. Disposition of Gas *(Sold, used for fuel, vented, etc.)*
SOLD

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth
				GREEN RIVER	1681
				BIRD'S NEST	1985
				MAHOGANY	2443
				WASATCH	5023
				MESAVERDE	7979

32. Additional remarks (include plugging procedure):
The first 165 ft. of the surface hole was drilled with a 12 1/4 in. bit. The remainder of the surface hole was drilled with an 11 in. bit. DQX I-80 csg was run from surface to 5,051 ft.; LTC I-80 csg was run from 5,051 ft to 10,190 ft. Attached is the chronological well history, perforation report & final survey.

33. Circle enclosed attachments:

1. Electrical/Mechanical Logs (1 full set req'd.)
2. Geologic Report
3. DST Report
4. Directional Survey
5. Sundry Notice for plugging and cement verification
6. Core Analysis
7 Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

Electronic Submission #148224 Verified by the BLM Well Information System.
For KERR MCGEE OIL & GAS ONSHORE L, sent to the Vernal

Name *(please print)* CARA MAHLER Title AUTHORIZED REPRESENTATIVE

Signature (Electronic Submission) Date 08/30/2012

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fradulent statements or representations as to any matter within its jurisdiction.

**** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ****

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-21L1S YELLOW		Spud Date: 3/9/2012	
Project: UTAH-UINTAH	Site: NBU 921-21E PAD		Rig Name No: H&P 298/298, CAPSTAR 310/310
Event: DRILLING	Start Date: 2/26/2012		End Date: 5/21/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)	UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2298/W/0/683/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
3/9/2012	7:30 - 10:00	2.50	MIRU	01	C	P		MIRU /// HOWCROFT 2 TRUCKS /// CAPSTAR 5 HANDS & 1 FORKLIFT // RELEASE TRUCKS @ 10:00 /// DERRICK IN AIR @ 10:00
	10:00 - 12:00	2.00	PRPSPD	14	A	P		WELD ON CONDUCTOR & RIG UP FLOWLINE
	12:00 - 13:00	1.00	PRPSPD	09	A	P		SLIP & CUT OFF 30' OF DRLG LINE
	13:00 - 13:30	0.50	PRPSPD	06	A	P		PU 12.25" BIT & 8" MUD MOTOR & TIH
	13:30 - 15:00	1.50	DRLSUR	02	B	P		DRILL 12.25" SURFACE HOLE F/ 49'-165'
	15:00 - 15:30	0.50	DRLSUR	06	A	P		TOOH & LAY DOWN 12.25" BIT
	15:30 - 16:30	1.00	DRLSUR	06	A	P		PICK UP 11" BIT & DIR TOOLS, SCRIBE & TIH
	16:30 - 19:00	2.50	DRLSUR	02	D	P		DRLG 11" SURFACE HOLE F/ 165'- 594' ROP= 429' @ 172 FPH WOB= 24-28K RPM= 55/105 SPP= 1000/800 GPM= 595 TRQ=2800/2200 PU/SO/RT= 64/54/59 NO LOSSES
	19:00 - 19:30	0.50	DRLSUR	08	B	Z		REPAIR LEAK IN FLOW LINE
	19:30 - 0:00	4.50	DRLSUR	02	D	P		DRLG 11" SURFACE HOLE F/ 594'-1154 ROP= 560' @ 124 FPH WOB= 24-28K RPM= 55/105 SPP= 1000/800 GPM= 595 TRQ=2800/2200 PU/SO/RT= 64/54/59 NO LOSSES
3/10/2012	0:00 - 12:00	12.00	DRLSUR	02	D	P		DRLG 11" SURFACE HOLE F/ 1154'-2239' ROP= 1085 ' @ 90 FPH WOB= 24-28K RPM= 55/105 SPP= 1400/1100 GPM= 595 TRQ=2800/2200 PU/SO/RT= 101/86/92 NO LOSSES
	12:00 - 12:30	0.50	DRLSUR	07	A	P		SERVICE RIG & EQUIPMENT

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-21L1S YELLOW		Spud Date: 3/9/2012	
Project: UTAH-UINTAH	Site: NBU 921-21E PAD		Rig Name No: H&P 298/298, CAPSTAR 310/310
Event: DRILLING	Start Date: 2/26/2012		End Date: 5/21/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)	UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2298/W/0/683/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	12:30 - 17:30	5.00	DRLSUR	02	D	P		DRLG 11" SURFACE HOLE F/ 2239'-2865' ROP= 626' @ 125 FPH WOB= 24-28K RPM= 55/105 SPP= 1400/1100 GPM= 595 TRQ=2800/2200 PU/SO/RT= 114/90/102 NO LOSSES FINAL SURVEY @ 2809'= 11.26 INC. & 183.54 AZ 7' HIGH & 1' RIGHT ROTATE 88% & SLIDE 12%
	17:30 - 18:00	0.50	DRLSUR	05	A	P		CIRC & COND. HOLE FOR 8-5/8" SURFACE CSG
	18:00 - 22:00	4.00	DRLSUR	06	A	P		LAY DOWN DRILL STRING & DIR TOOLS
	22:00 - 0:00	2.00	CSG	12	C	P		PJSM /// RUN 64 JT'S, 8-5/8", 28#, J-55, LT& C CSG /// SHOE SET @ 2835' & BAFFLE @ 2789'
3/11/2012	0:00 - 1:30	1.50	CSG	12	C	P		FINISH RUNNING 8.625" SURFACE CSG
	1:30 - 3:00	0.50	CSG	05	A	P		CIRC. 8-5/8" CSG @ 2835'
	3:00 - 4:00	1.00	CSG	12	E	P		PJSM WITH PRO PETRO CMT CREW /// TEST LINES TO 2000 PSI /// PUMP 20 BBL'S WATER FOLLOWED BY 20 BBL GEL WATER SPACER /// LEAD = 240 SX CLASS G CMT @ 11.0 WT & 3.82 YIELD /// TAIL = 200 SX CLASS G CMT @ 15.8 WT & 1.15 YIELD /// DROP PLUG & DISPLACE W/ 170 BBL'S WATER /// PLUG DN @ 04:03 03/11/2012 /// BUMP PLUG W/ 800 PSI /// FINAL LIFT = 500 PSI /// CHECK FLOATS-HELD W/ .5 BBL'S BACK /// LOST CIRC 10 BBL'S BEFORE BUMPING PLUG /// NO CMT TO SURFACE .
	4:00 - 5:00	1.00	CSG	14	A	P		CUT OFF CONDUCTOR & HANG 8.625" SURFACE CSG
	5:00 - 6:00	1.00	CSG	12	E	P		RUN 200' OF 1" PIPE & PUMP TOP OUT W/ 110 SX CLASS G CMT @ 15.8 WT & 1.15 YIELD /// CMT TO SURFACE /// RELEASE RIG @ 06:00 03/11/2012 TO THE NBU 921-21E1S
5/15/2012	5:00 - 9:00	4.00	MIRU	01	C	P		SKID RIG 8',JUMP SKID RAILS,SKID 2',ALIGN RIG OVER WELL,
	9:00 - 11:00	2.00	PRPSPD	14	A	P		CT JSA NIPPLE UP BOP,CHOKE LINE, MUD LINE ,REMOVE SMITH BEARING ASSEMBLY
	11:00 - 15:00	4.00	PRPSPD	15	A	P		PRESSURE TEST /TEST CASING 1500 HIGH 250 LOW FOR 30 MIN / PRESSURE TEST H&P EQUIP BLIND RAMS,PIPE RAMS , FLOOR VALVE, KILL LINES & KILL LINE VALVES, BOP WING VALVES , HCR VALVE + CHOKE LINE; INNER AND OUTER CHOKE VALVES & MANIFOLD TO 250 PSI LOW @ 5 MINUTES + 5000 PSI HIGH @ 10 MINUTES / TEST ANNULAR TO 250 PSI LOW @ 5 MINUTES + 2500 PSI HIGH
	15:00 - 15:30	0.50	PRPSPD	14	B	P		SET WEAR BUSHING ,INSTALL BEARING ASSEMBLY
	15:30 - 16:30	1.00	PRPSPD	15	A	P		TEST MI SWACO,CHOKE MANIFOLD & ORBIT VALVES, 1,000 PSI
	16:30 - 19:00	2.50	PRPSPD	06	A	P		PICK UP & MAKE UP BHA #1 SCRIBE ,ORIENTATE & TEST SAME / TIH TO 2,743' TAG CEMENT

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-21L1S YELLOW		Spud Date: 3/9/2012	
Project: UTAH-UINTAH	Site: NBU 921-21E PAD		Rig Name No: H&P 298/298, CAPSTAR 310/310
Event: DRILLING	Start Date: 2/26/2012		End Date: 5/21/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)	UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2298/W/0/683/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	19:00 - 20:30	1.50	PRPSPD	07	B	P		PRE SPUD INSPECTION / LEVEL DERRICK / INSTALL ROTATING RUBBER / PUMP THROUGH MI SWACO
	20:30 - 22:00	1.50	PRPSPD	09	A	P		SLIP & CUT DRILL LINE
	22:00 - 22:00	0.00	PRPSPD	07	A	P		RIG SERVICE
	22:00 - 0:00	2.00	PRPSPD	02	F	P		DRILL FLOAT TRAC F/ 2,743 -BAFFLE @ 2,820 SHOE @ 2,866 OPEN HOLE TO 2,882
5/16/2012	0:00 - 7:00	7.00	DRLPRC	02	D	P		DRILL / SLIDE / SURVEY F/2,882 TO 3,943 = 1,061' @ 151.5 FPH WOB 20,000-24,000 TOP DRIVE RPM 40-70 MUD MOTOR RPM 90-115 PUMPS 110-122 SPM=495-550 GPM PUMP PRESSURE ON/OFF BTM 2,050/ 1,725 TORQUE ON/OFF BTM 10,000/ 4,000 PICK UP WT 114,000 SLACK OFF WT 96,000 ROT WT 106,000 SLIDE 17' IN 20 MIN .01.6% OF FOOTAGE DRILLED,4.76%OF HRS DRILLED MW 8.5 VIS 27 /NOV D-WATER
	7:00 - 7:30	0.50	DRLPRC	07	A	P		RIG SERVICE
	7:30 - 17:00	9.50	DRLPRC	02	D	P		DRILL / SLIDE / SURVEY F/3,943 TO 5,453 = 1,510' @158.9 FPH WOB 20,000-24,000 TOP DRIVE RPM 40-70 MUD MOTOR RPM 90-115 PUMPS 110-122 SPM=495-550 GPM PUMP PRESSURE ON/OFF BTM 2,250/ 1,925 TORQUE ON/OFF BTM 9,000/ 6,000 PICK UP WT 150,000 SLACK OFF WT 134,000 ROT WT 106,000 SLIDE 135 IN 115 MIN .8% OF FOOTAGE DRILLED,20%OF HRS DRILLED
	17:00 - 0:00	7.00	DRLPRC	02	D	P		DRILL / SLIDE / SURVEY F/5,463 TO 6,485 = 1,022 @146 FPH WOB 20,000-24,000 TOP DRIVE RPM 40-70 MUD MOTOR RPM 90-115 PUMPS 110-122 SPM=495-550 GPM PUMP PRESSURE ON/OFF BTM 2,230/ 2,020 TORQUE ON/OFF BTM 9,000/ 8,000 PICK UP WT 168,000 SLACK OFF WT 139,000 ROT WT 152,000 SLIDE 30' IN 30 MIN 2.9% OF FOOTAGE DRILLED,6%OF HRS DRILLED

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-21L1S YELLOW			Spud Date: 3/9/2012
Project: UTAH-UINTAH	Site: NBU 921-21E PAD		Rig Name No: H&P 298/298, CAPSTAR 310/310
Event: DRILLING	Start Date: 2/26/2012		End Date: 5/21/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)	UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2298/W/0/683/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
5/17/2012	0:00 - 6:00	6.00	DRLPRC	02	D	P		DRILL / SLIDE / SURVEY F/6,485 TO 7,075 = 590' @ 98.3 FPH WOB 20,000-26,000 TOP DRIVE RPM 40-70 MUD MOTOR RPM 90-115 PUMPS 110-122 SPM=495-550 GPM PUMP PRESSURE ON/OFF BTM 2,230/ 2,020 TORQUE ON/OFF BTM 12,000/ 9,000 PICK UP WT 180,000 SLACK OFF WT 147,000 ROT WT 162,000 MUD WT 8.5 VIS 27 NO FLARE
	6:00 - 13:00	7.00	DRLPRC	02	D	P		DRILL / SLIDE / SURVEY F/ 7,075 TO 7,722 = 647' @ 92.4FPH WOB 20,000-26,000 TOP DRIVE RPM 40-70 MUD MOTOR RPM 90-115 PUMPS 110-122 SPM=495-550 GPM PUMP PRESSURE ON/OFF BTM 2,350/ 2,050 TORQUE ON/OFF BTM 11,000/ 9,000 PICK UP WT 196,000 SLACK OFF WT 154,000 ROT WT 172,000 SLIDE 50' IN 65 MIN .01.6% OF FOOTAGE DRILLED,4.76%OF HRS DRILLED MUD WT 8.5 VIS 27 NO FLARE
	13:00 - 14:00	1.00	DRLPRC	07	A	P		RIG SERVICE ,CHANGE OIL IN TOP DRIVE
	14:00 - 0:00	10.00	DRLPRC	02	D	P		DRILL / SURVEY F/ 7,732 TO 8,514 = 782' @ 76.2 FPH WOB 22,000-30,000 TOP DRIVE RPM 40-60 MUD MOTOR RPM 90- 115 PUMPS 110-122 SPM=495-550 GPM PUMP PRESSURE ON/OFF BTM 2,370/ 1,970 TORQUE ON/OFF BTM 15,000/ 12,000 PICK UP WT 207,000 SLACK OFF WT 154,000 ROT WT 182,000 MW 9.2 VIS 35 NO MUD LOSS SWACO ON LINE 8,360' /ANN PRESS 100 / TRAPPED 200 PSI 5-10' FLARE

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-21L1S YELLOW		Spud Date: 3/9/2012	
Project: UTAH-UINTAH	Site: NBU 921-21E PAD		Rig Name No: H&P 298/298, CAPSTAR 310/310
Event: DRILLING	Start Date: 2/26/2012		End Date: 5/21/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)	UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2298/W/0/683/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
5/18/2012	0:00 - 6:00	6.00	DRLPRC	02	D	P		DRILL / SURVEY F/8,514 TO 9,150= 636" @ 106 FPH WOB 24,000-30,000 TOP DRIVE RPM 40-60 MUD MOTOR RPM 90-115 PUMPS 110-122 SPM=495-550 GPM PUMP PRESSURE ON/OFF BTM 2,825/ 2,670 TORQUE ON/OFF BTM 12,000/ 9,000 PICK UP WT 214,000 SLACK OFF WT 161,000 ROT WT 190,000 MUD WT 9.2 VIS 35 15-20' FLARE ANN PRESS150 TRAPPED PRESS 325 NO MUD LOSS
	6:00 - 12:30	6.50	DRLPRC	02	D	P		DRILL / SLIDE / SURVEY F/9,150 -9,520= 370" @ 56.9 FPH WOB 24,000-30,000 TOP DRIVE RPM 40-60 MUD MOTOR RPM 90-115 PUMPS 110-122 SPM=495-550 GPM PUMP PRESSURE ON/OFF BTM 2,850/ 2,580 TORQUE ON/OFF BTM 13,000/ 12,000 PICK UP WT 235,000 SLACK OFF WT 165,000 ROT WT 195,000 SLIDE 55' IN 120 MIN .01.15% OF FOOTAGE DRILLED,4.30%OF HRS DRILLED MUD WT 9.2 VIS 35 15-20' FLARE ANN PRESS 275 TRAPPED PRESS 400 PSI TOP DRIVE GEAR BOX LOCKED UP WHILE DRILLING / UNABLE TO ROTATE
	12:30 - 18:30	6.00	DRLPRC	08	B	P		CIRC, RAISE MUD WT TO 11.5,TO KILL WELL ,FOR TRIP OUT ,TO CHANGE OUT TOP DRIVE,SPOT 85 BBLS 12# ON BTM
	18:30 - 22:00	3.50	DRLPRC	08	B	Z		TRIP OUT TO CASING SHOE,FLOW CHECK
	22:00 - 22:30	0.50	DRLPRC	07	B	P		RIG SERVICE
	22:30 - 0:00	1.50	DRLPRC	08	B	Z		HOLD CJ JSA WITH ALL H&P HANDS ,CRANE HANDS ON CHANGING OUT TOP DRIVE / REMOVE TOP DRIVE
5/19/2012	0:00 - 16:30	16.50	MAINT	08	B	Z		CHANGE OUT TOP DRIVE ,RU AND FUNCTION TEST TDS
	16:30 - 18:00	1.50	DRLPRC	06	A	P		TOH / CHECK M MTR, MWD, CHANGE BITS
	18:00 - 20:30	2.50	DRLPRC	06	A	P		TRIP IN TO CSG SHOE,BREAK CIRC CHANGE OUT ROTATING HEAD RUBBER,CIH BREAK CIRC TIH WASH THRU BRIDGES@ 4,765
	20:30 - 21:30	1.00	DRLPRC	03	A	X		WASH & REAM THROURH BRIDGES F/ 4,765-5,269,
	21:30 - 0:00	2.50	DRLPRC	06	A	P		TRIP IN HOLE ,TIGHT SPOT 9,100 CIH TO 9,425 BREAK CIRC,
5/20/2012	0:00 - 0:30	0.50	DRLPRC	03	D	P		WASH & REAM 95' TO BTM 10' FILL,4/10 MUD CUT ON BTMS UP ,3O' FLARE

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-21L1S YELLOW		Spud Date: 3/9/2012	
Project: UTAH-UINTAH	Site: NBU 921-21E PAD		Rig Name No: H&P 298/298, CAPSTAR 310/310
Event: DRILLING	Start Date: 2/26/2012		End Date: 5/21/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)	UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2298/W/0/683/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	0:30 - 6:00	5.50	DRLPRC	02	D	P		DRILL / SURVEY F/9,520 TO 9,875= 355" @ 64.5 FPH WOB 24,000-30,000 TOP DRIVE RPM 40-80 MUD MOTOR RPM 90-115 PUMPS 110- SPM=495- GPM PUMP PRESSURE ON/OFF BTM 3,150/ 2,900 TORQUE ON/OFF BTM 13,000/ 11,000 PICK UP WT 210,000 SLACK OFF WT 170,000 ROT WT 195,000, MUD WT 11.5 VIS 38 MUD LOSS 70 BBLS
	6:00 - 11:30	5.50	DRLPRC	02	D	P		DRILL / SURVEY F/9,875 TO10,200 TD= 325" @ 59 FPH WOB 24,000-30,000 TOP DRIVE RPM 40-80 MUD MOTOR RPM 90-115 PUMPS 105- SPM=472- GPM PUMP PRESSURE ON/OFF BTM 2,900/ 2,570 TORQUE ON/OFF BTM 13,000/ 11,000 PICK UP WT 233,000 SLACK OFF WT 170,000 ROT WT 1200,000, MUD WT 11.7 VIS 38
	11:30 - 13:00	1.50	DRLPRC	05	C	P		CIRC & COND HOLE F/ CASING,PUMP SWEEPS,MUD WT 11.7 VIS 40
	13:00 - 14:00	1.00	DRLPRC	06	E	P		12 STAND WIPER TRIP TO 9,000,/ NO PROMLEM,
	14:00 - 16:00	2.00	DRLPRC	05	C	P		CIRC AND COND HOLE FOR CASING PUMP SWEEP,,2/10 MUD CUT ON BTM S UP, 10' FLARE ,SPOT 90 BBLS 12.5 ON BTM MUD WT 11.8 VIS 38, MUD LOSS 50 BBLS
	16:00 - 21:30	5.50	DRLPRC	06	D	P		TRIP OUT FOR CASING,WORK OUT TIGHT SPOT @ 4185,3,965 / FLOW CHECK AT CSG SHOE,PULL ROTATING RUBBER,BHA,MWD, STAND BACK DIR TOOLS,BREAK BIT,L/D M MTR,
	21:30 - 22:00	0.50	DRLPRC	14	B	P		PULL SMITH BEARING ASSEMBLY/ PULL WEAR BUASHING,INSTALL BEARING ASSEMBLY
	22:00 - 22:30	0.50	DRLPRC	12	A	P		CHANGE OUT DRILLING BAILS TO 18; CASING BAILS
	22:30 - 0:00	1.50	DRLPRC	12	A	P		HOLD CTJSA RIG UP FRANKS TO RUN CASING
5/21/2012	0:00 - 9:00	9.00	CSGPRO	12	C	P		MAKE UP FLOAT EQUIP, RUN 122 JTS OF 41/2 11.6# I-80 LTC(5,137')& 1-XO, 118 JTS 11.6#I-80(5,050')DQX PRODUCTION CASING TO 10,189' W/ NO PROBLEMS / SHOE @ 10,189' FLOAT COLLAR @ 10,144 / M VERDE MARKER @ 7,934' / X-O @ 5,050' TOTAL JTS RAN 242
	9:00 - 10:30	1.50	CSGPRO	05	D	P		CIRC CASING,RIG DOWN CASERS, CTJSA W/ BJ

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-21L1S YELLOW		Spud Date: 3/9/2012	
Project: UTAH-UINTAH	Site: NBU 921-21E PAD		Rig Name No: H&P 298/298, CAPSTAR 310/310
Event: DRILLING	Start Date: 2/26/2012		End Date: 5/21/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)	UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2298/W/0/683/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	10:30 - 13:00	2.50	CSGPRO	12	E	P		INSTALL BJ CMT HEAD , TEST PUMP & LINES TO 5,200 PSI, ,DROP BOTTOM PLUG PUMP 25 BBLS FW PUMP 552 SKS LEAD CEMENT @ 12.5 PPG,(198.5 BBLS) (PREM LITE II + .0.25 pps CELLO FLAKE + 10 pps KOL SEAL + .05 lb/sx STATIC FREE + 6% bwoc BENTONITE + .4% bwoc SODIUM META SILICATE + ..3 % R-3 + 118% FRESH WATER / (10.62 gal/sx, 2.02 yield) + 1,082 SX TAIL @ 14.3 ppg(254 BBLS)+ (CLS G 50/50 POZ + 10% SALT + .05llbs/sx STATIC FREE + .2% R3 + .002 GPS FP-6L + 2% BENTONITE +0.5%EC-1+ 58.6% FW / (5.94 gal/sx, 1.32 yield) / DROP TOP PLUG & DISPLACE W/ 157.7 BBLS H2O + ADDITIVES / PLUG DOWN @ 12:47 HOURS / FLOATS HELD W/ 2. BBLS H2O RETURNED TO INVENTORY/ GOOD RETURNS THROUGH OUT WITH 20 H20 SPACER TO SURFACE / LIFT PRESSURE @2,863 PSI / BUMP PRESSURE TO 3,565 PSI / TOP OF TAIL CEMENT CALCULATED @ 3,900 / RIG DOWN BJ
	13:00 - 14:00	1.00	CSGPRO	14	A	P		FLUSH OUT & PICK UP BOP STACK,SET C-22 CSG SLIPS W/ 110,000,CUT OFF CASING,
	14:00 - 16:00	2.00	RDMO	01	E	P		CLEAN PITS / PREP TO SKID,X/O BAILS / RIG RELEASED TO NBU 921-21E1S @16:00 HRS 05/21/2012

1 General

1.1 Customer Information

Company	US ROCKIES REGION
Representative	
Address	

1.2 Well/Wellbore Information

Well	NBU 921-21L1S YELLOW	**Wellbore No.**	OH
Well Name	NBU 921-21L1S	**Wellbore Name**	NBU 921-21L1S
Report No.	1	**Report Date**	7/9/2012
Project	UTAH-UINTAH	**Site**	NBU 921-21E PAD
Rig Name/No.		**Event**	COMPLETION
Start Date	7/9/2012	**End Date**	7/26/2012
Spud Date	3/9/2012	**Active Datum**	RKB @4,864.00usft (above Mean Sea Level)
UWI	SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2298/W/0/683/0/0		

1.3 General

Contractor	CASED HOLE SOLUTIONS	**Job Method**	PERFORATE	**Supervisor**	ED GUDAC
Perforated Assembly	PRODUCTION CASING	**Conveyed Method**	WIRELINE		

1.4 Initial Conditions

Fluid Type	KCL WATER	**Fluid Density**	
Surface Press		**Estimate Res Press**	
TVD Fluid Top		**Fluid Head**	
Hydrostatic Press		**Press Difference**	
Balance Cond	NEUTRAL		

1.5 Summary

Gross Interval	6,517.0 (usft)-9,879.0 (usft	**Start Date/Time**	7/9/2012 12:00AM
No. of Intervals	59	**End Date/Time**	7/9/2012 12:00AM
Total Shots	273	**Net Perforation Interval**	91.00 (usft)
Avg Shot Density	3.00 (shot/ft)	**Final Surface Pressure**	
		Final Press Date	

2 Intervals

2.1 Perforated Interval

Date	Formation/ Reservoir	CCL@ (usft)	CCL-TS (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diameter (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
7/9/2012 12:00AM	WASATCH/			6,517.0	6,520.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (usft)	CCL-TS (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diameter (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
7/9/2012 12:00AM	WASATCH/			6,531.0	6,533.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	WASATCH/			6,571.0	6,573.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	WASATCH/			6,904.0	6,905.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	WASATCH/			6,924.0	6,925.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	WASATCH/			6,941.0	6,942.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	WASATCH/			6,966.0	6,967.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	WASATCH/			7,000.0	7,001.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	WASATCH/			7,017.0	7,018.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	WASATCH/			7,075.0	7,077.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	WASATCH/			7,143.0	7,144.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	WASATCH/			7,176.0	7,177.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	WASATCH/			7,211.0	7,212.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	WASATCH/			7,256.0	7,258.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	WASATCH/			7,307.0	7,308.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	WASATCH/			7,381.0	7,383.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	WASATCH/			7,504.0	7,506.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	WASATCH/			7,545.0	7,546.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	WASATCH/			7,628.0	7,629.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	WASATCH/			7,673.0	7,675.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	WASATCH/			7,719.0	7,720.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	WASATCH/			7,874.0	7,876.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (usft)	CCL-TS (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diameter (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
7/9/2012 12:00AM	WASATCH/			7,890.0	7,892.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	WASATCH/			7,920.0	7,921.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	WASATCH/			7,946.0	7,947.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	WASATCH/			7,960.0	7,961.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESA VERDE/			8,020.0	8,023.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESA VERDE/			8,061.0	8,063.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESA VERDE/			8,124.0	8,126.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESA VERDE/			8,160.0	8,161.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESA VERDE/			8,269.0	8,271.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESA VERDE/			8,325.0	8,327.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESA VERDE/			8,421.0	8,422.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESA VERDE/			8,493.0	8,494.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESA VERDE/			8,543.0	8,545.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESA VERDE/			8,611.0	8,612.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESA VERDE/			8,639.0	8,640.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESA VERDE/			8,677.0	8,678.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESA VERDE/			8,706.0	8,708.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESA VERDE/			8,721.0	8,722.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESA VERDE/			8,740.0	8,741.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESA VERDE/			8,788.0	8,789.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESA VERDE/			8,890.0	8,893.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (usft)	CCL-TS (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diameter (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
7/9/2012 12:00AM	MESA VERDE/			9,032.0	9,034.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESA VERDE/			9,087.0	9,089.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESA VERDE/			9,352.0	9,355.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESA VERDE/			9,382.0	9,384.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESA VERDE/			9,435.0	9,437.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESA VERDE/			9,489.0	9,491.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESA VERDE/			9,514.0	9,515.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESA VERDE/			9,550.0	9,552.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESA VERDE/			9,602.0	9,603.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESA VERDE/			9,630.0	9,632.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESA VERDE/			9,666.0	9,667.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESA VERDE/			9,699.0	9,700.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESA VERDE/			9,713.0	9,715.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESA VERDE/			9,771.0	9,772.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESA VERDE/			9,836.0	9,837.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
7/9/2012 12:00AM	MESA VERDE/			9,877.0	9,879.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	

3 Plots

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-21L1S YELLOW		Spud Date: 3/9/2012
Project: UTAH-UINTAH	Site: NBU 921-21E PAD	Rig Name No: ROYAL WELL SERVICE/3, ROYAL WELL SERVICE/3
Event: COMPLETION	Start Date: 7/9/2012	End Date: 7/26/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)	UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2298/W/0/683/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
3/9/2012	-							
7/10/2012	7:45 - 9:30	1.75	FRAC	33	C	P		FILL SURFACE CSG. MIRU B&C QUICK TEST. PSI TEST T/ 1000 PSI. HELD FOR 15 MIN LOST 0 PSI. PSI TEST T/ 3500 PSI. HELD FOR 15 MIN LOST 31 PSI. 1ST PSI TEST T/ 7000 PSI. HELD FOR 30 MIN LOST 87 PSI. NO COMMUNICATION OR MIGRATION WITH SURFACE CSG BLEED OFF PSI. MOVE T/ NEXT WELL. SWIFW
7/12/2012	7:30 - 10:30	3.00	COMP	37		P		PERF STG 1)PU 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH PERF AS PER PERF DESIGN. POOH. SWIFW
7/16/2012	13:00 - 18:00	5.00	COMP	36	B	P		FRAC STG 1)WHP 2185 PSI, BRK 3719 PSI @ 4.8 BPM. ISIP 2848 PSI, FG .73. CALC PERFS OPEN @ 50.5 BPM @ 5383 PSI = 100% HOLES OPEN. (24/24 HOLES OPEN) ISIP 3094 PSI, FG .76, NPI 246 PSI. MP 6053 PSI, MR 51.5 BPM, AP 5542 PSI, AR 49.2 BPM, PUMPED 30/50 OWATTA SAND. SWI, X-OVER FOR WL. PERF STG 2)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 9642' P/U PERF AS PER DESIGN. POOH, X-OVER FOR FRAC CREW. FRAC STG 2)WHP 1850 PSI, BRK 3449 PSI @ 5.2 BPM. ISIP 2581 PSI, FG .71. CALC PERFS OPEN @ 50.9 BPM @ 5478 PSI = 96% HOLES OPEN. (23/24 HOLES OPEN) ISIP 3238 PSI, FG 0.78, NPI 657 PSI. MP 6117 PSI, MR 50.9 BPM, AP 5442 PSI, AR 50.4 BPM, PUMPED 30/50 OWATTA SAND
7/17/2012	6:45 - 7:00	0.25	COMP	48		P		HSM. HIGH PSI LINES

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-21L1S YELLOW		Spud Date: 3/9/2012
Project: UTAH-UINTAH	Site: NBU 921-21E PAD	Rig Name No: ROYAL WELL SERVICE/3, ROYAL WELL SERVICE/3
Event: COMPLETION	Start Date: 7/9/2012	End Date: 7/26/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)	UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2298/W/0/683/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	7:00 - 18:00	11.00	COMP	36	B	P		PERF STG 3)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM ,.36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 9467' P/U PERF AS PER DESIGN. FRAC STG 3)WHP 2060 PSI, BRK 3367 PSI @ 5.1 BPM. ISIP 2663 PSI, FG .72. CALC PERFS OPEN @ 45.4 BPM @ 5630 PSI = 86% HOLES OPEN. (18/21 HOLES OPEN) ISIP 3117 PSI, FG .77, NPI 454 PSI. MP 5897 PSI, MR 52.5 BPM, AP 5156 PSI, AR 50.3 BPM, PUMPED 30/50 OWATTA SAND PERF STG 4)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM ,.36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 9119' P/U PERF AS PER DESIGN. FRAC STG 4)WHP 880 PSI, BRK 6292 PSI @ 5.1 BPM. ISIP 2850 PSI, FG .76. CALC PERFS OPEN @ 50.5 BPM @ 5406 PSI = 100% HOLES OPEN. (21/21 HOLES OPEN) ISIP 2869 PSI, FG .76, NPI 19 PSI. MP 5613 PSI, MR 52.5 BPM, AP 5126 PSI, AR50.3 BPM, PUMPED 30/50 OWATTA SAND PERF STG 5)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM ,.36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 8819' P/U PERF AS PER DESIGN. FRAC STG 5)WHP 1940 PSI, BRK 2864 PSI @ 4.8 BPM. ISIP 2275 PSI, FG .70. CALC PERFS OPEN @ 52.6 BPM @ 4760 PSI = 100% HOLES OPEN. (24/24 HOLES OPEN) ISIP 2919 PSI, FG .77, NPI 644 PSI. MP 5088 PSI, MR 55.1 BPM, AP 4608 PSI, AR 52.8 BPM, PUMPED 30/50 OWATTA SAND PERF STG 6)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM ,.36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 8575' P/U PERF AS PER DESIGN. FRAC STG 6)WHP 2050 PSI, BRK 2464 PSI @ 6.8 BPM. ISIP 2053 PSI, FG .68. CALC PERFS OPEN @ 52.9 BPM @ 4135 PSI = 100% HOLES OPEN. (24/24 HOLES OPEN) ISIP 2638 PSI, FG .75, NPI 585 PSI. MP 5122 PSI, MR 54.5 BPM, AP 4218 PSI, AR 52.9 BPM, PUMPED 30/50 OWATTA SAND

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-21L1S YELLOW		Spud Date: 3/9/2012
Project: UTAH-UINTAH	Site: NBU 921-21E PAD	Rig Name No: ROYAL WELL SERVICE/3, ROYAL WELL SERVICE/3
Event: COMPLETION	Start Date: 7/9/2012	End Date: 7/26/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)	UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2298/W/0/683/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
								PERF STG 7)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM ,.36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 8191' P/U PERF AS PER DESIGN. FRAC STG 7)WHP 1180 PSI, BRK 2448 PSI @ 4.7 BPM. ISIP 1655 PSI, FG .64. CALC PERFS OPEN @ 52.3 BPM @ 4119 PSI = 100% HOLES OPEN. (24/24 HOLES OPEN) ISIP 2430 PSI, FG .74, NPI 775 PSI. MP 4720 PSI, MR 55.6 BPM, AP 4028 PSI, AR 53 BPM, PUMPED 30/50 OWATTA SAND PERF STG 8)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM ,.36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 7991' P/U PERF AS PER DESIGN.

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-21L1S YELLOW			Spud Date: 3/9/2012
Project: UTAH-UINTAH	Site: NBU 921-21E PAD		Rig Name No: ROYAL WELL SERVICE/3, ROYAL WELL SERVICE/3
Event: COMPLETION	Start Date: 7/9/2012		End Date: 7/26/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)	UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2298/W/0/683/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
7/18/2012	7:00 - 18:00	11.00	COMP	36	E	P		FRAC STG 8)WHP 1700 PSI, BRK 3055 PSI @ 4.6 BPM. ISIP 1921 PSI, FG .68. CALC PERFS OPEN @ 53.3 BPM @ 4576 PSI = 100% HOLES OPEN. (21/21 HOLES OPEN) ISIP 2822 PSI, FG .80, NPI 881 PSI. MP 5591 PSI, MR 55.1 BPM, AP 4877 PSI, AR 52.7 BPM, PUMPED 30/50 OWATTA SAND PERF STG 9)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM ,.36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @7750 ' P/U PERF AS PER DESIGN. FRAC STG 9)WHP 1100 PSI, BRK 2855 PSI @ 4.8 BPM. ISIP 2248 PSI, FG .73. CALC PERFS OPEN @ 47.7 BPM @ PSI = 5893% HOLES OPEN. (17/21 HOLES OPEN) ISIP 2866 PSI, FG .82, NPI 618 PSI. MP 6114 PSI, MR 51.5 BPM, AP 5591 PSI, AR 48.1 BPM, PUMPED 30/50 OWATTA SAND PERF STG 10)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM ,.36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 7413' P/U PERF AS PER DESIGN. FRAC STG 10)WHP 1435 PSI, BRK 2555 PSI @ 4.7 BPM. ISIP 2044 PSI, FG .72. CALC PERFS OPEN @ 52.3 BPM @ 3891 PSI = 100% HOLES OPEN. (24/24 HOLES OPEN) ISIP 2242 PSI, FG .75, NPI 198 PSI. MP 4753 PSI, MR 57.1 BPM, AP 4200 PSI, AR 52.5 BPM, PUMPED 30/50 OWATTA SAND PERF STG 11)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM ,.36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 7107' P/U PERF AS PER DESIGN. FRAC STG 11)WHP 1188 PSI, BRK 2428 PSI @ 4.7 BPM. ISIP 1936 PSI, FG .72. CALC PERFS OPEN @ 53.7 BPM @ 3898 PSI = 100% HOLES OPEN. (24/24 HOLES OPEN) ISIP 2144 PSI, FG .75, NPI 208 PSI. MP 4529 PSI, MR 54.6 BPM, AP 4041 PSI, AR 52.6 BPM, PUMPED 30/50 OWATTA SAND

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-21L1S YELLOW		Spud Date: 3/9/2012
Project: UTAH-UINTAH	Site: NBU 921-21E PAD	Rig Name No: ROYAL WELL SERVICE/3, ROYAL WELL SERVICE/3
Event: COMPLETION	Start Date: 7/9/2012	End Date: 7/26/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)	UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2298/W/0/683/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
								PERF STG 12)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM ,.36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 6603' P/U PERF AS PER DESIGN. FRAC STG 12)WHP 200 PSI, BRK 1421 PSI @ 4.6 BPM. ISIP 872 PSI, FG .57. CALC PERFS OPEN @ 52.7 BPM @ 3175 PSI = 100% HOLES OPEN. (21/21 HOLES OPEN) ISIP 1641 PSI, FG .69, NPI 769 PSI. MP 4166 PSI, MR 57.7 BPM, AP 3816 PSI, AR 54.8 BPM, PUMPED 30/50 OWATTA SAND KILL PLUG) RIH W/ HAL 8K CBP, SET CBP @ 6467', R/D FRAC AND WIRELINE TOTAL SAND = 257,871 LBS TOTAL CLFL = 10,656 BBL
7/19/2012	-							
7/25/2012	14:00 - 18:00	4.00	COMP	30		P		MIRU. NDWH. NUBOP. TEST BLIND RAMS GOOD @3000#. P/U & RIH W/ 75 JTS NEW 2-3/8" L-80 4.7# TBNG + XN + POBS+ 3-7/8" BIT. SWIFN.
7/26/2012	7:00 - 7:15	0.25	COMP	48		P		SAFETY = JSA.

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-21L1S YELLOW		Spud Date: 3/9/2012
Project: UTAH-UINTAH	Site: NBU 921-21E PAD	Rig Name No: ROYAL WELL SERVICE/3, ROYAL WELL SERVICE/3
Event: COMPLETION	Start Date: 7/9/2012	End Date: 7/26/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)	UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2298/W/0/683/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	7:15 - 20:30	13.25	COMP	30		P		FINISH RIH W/ TBNG. T/U ON CBP @6467'. R/U PUMP. PRESSURE TEST BOP'S GOOD @ 3000#. R/U POWER SWIVEL. D/O 12 PLUGS AS FOLLOWS: CBP #1) DRLG OUT BAKER 8K CBP @ 6467' IN 8 MIN. 200 LBS DIFF. PSI. RIH, TAG SND @ 5980'. C/O 23' OF SND. FCP = 0 PSI. CBP #2) DRLG OUT BAKER 8K CBP @ 6603' IN 8 MIN. 300 LBS DIFF. PSI. RIH, TAG SND @ 7085'. C/O 22 ' OF SND. FCP = 0 PSI. CBP #3) DRLG OUT BAKER 8K CBP @ 7107' IN 8 MIN. 400 LBS DIFF. PSI. RIH, TAG SND @ 7380'. C/O 33' OF SND. FCP = 150 PSI. CBP #4) DRLG OUT BAKER 8K CBP @ 7413' IN 9 MIN. 400 LBS DIFF. PSI. RIH, TAG SND @ 7725'. C/O 25' OF SND. FCP = 100 PSI. CBP #5) DRLG OUT BAKER 8K CBP @ 7750' IN 9MIN. 800 LBS DIFF. PSI. RIH, TAG SND @ 7953'. C/O 33' OF SND. FCP = 250 PSI. CBP #6) DRLG OUT BAKER 8K CBP @ 7991' IN 8 MIN. 750 LBS DIFF. PSI. RIH, TAG SND @ 8181'. C/O 11' OF SND. FCP = 300 PSI. CBP #7) DRLG OUT BAKER 8K CBP @ 8191' IN 7 MIN. 1000 LBS DIFF. PSI. RIH, TAG SND @ 8562'. C/O 13' OF SND. FCP = 350 PSI. CBP #8) DRLG OUT BAKER 8K CBP @ 8575' IN 9 MIN. 600 LBS DIFF. PSI. RIH, TAG SND @ 8792'. C/O 27' OF SND. FCP = 400 PSI. CBP #9) DRLG OUT BAKER 8K CBP @ 8819' IN 9 MIN. 800 LBS DIFF. PSI. RIH, TAG SND @ 9089'. C/O 20' OF SND. FCP = 400 PSI. CBP #10) DRLG OUT BAKER 8K CBP @ 9119' IN 7 MIN. 500 LBS DIFF. PSI. RIH, TAG SND @ 9428'. C/O 34' OF SND. FCP = 500 PSI. CBP #11) DRLG OUT BAKER 8K CBP @ 9467' IN 7

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-21L1S YELLOW		Spud Date: 3/9/2012
Project: UTAH-UINTAH	Site: NBU 921-21E PAD	Rig Name No: ROYAL WELL SERVICE/3, ROYAL WELL SERVICE/3
Event: COMPLETION	Start Date: 7/9/2012	End Date: 7/26/2012
Active Datum: RKB @4,864.00usft (above Mean Sea Level)	UWI: SW/NW/0/9/S/21/E/21/0/0/26/PM/N/2298/W/0/683/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
								MIN. 500 LBS DIFF. PSI. RIH, TAG SND @ 9632'. C/O 16' OF SND. FCP = 550 PSI. CBP #12) DRLG OUT BAKER 8K CBP @ 9642' IN 7 MIN. 700 LBS DIFF. PSI. RIH W/ TOTAL OF 316 JTS L-80 TBNG. C/O TO PBTD @10,041' CIRC WELL CLEAN. FCP = 550 PSI. R/D SWIVEL. L/D 19 JTS TBNG. LAND WELL AS FOLLOWS: KB= 26' HANGER= .83' 297 JTS 2-3/8" L-80 4.7# TBNG = 9418.19' XN = 1.34' POBS= 2.40' EOT @ 9448.76' NDBOP. NUWH. PRESSURE TEST FLOWLINES GOOD @ 4000 PSI. DROP BALL DOWN TBNG. PUMP OFF BIT. TURN WELL OVER TO FLOWBACK CREW @ 2030. SICP= 2000#. SITP= 900#. NOTE: 10K ANNULAR WAS ROLLING OFF THE SEALS ON THE TBNG HANGER. HAD TO WAIT FOR WEATHERFORD TO BRING OUT NEW STYLE HANGER.
	20:30 - 20:30	0.00	COMP	50				WELL TURNED TO SALES @ 2130 HR ON 7/26/2012, 1100 MCFD, 1800 BWPD, FCP 2800#, FTP 1750#, 20/64" CK.

Project: UTAH - UTM (feet), NAD27, Zone 12N
Site: UINTAH_NBU 921-21E PAD
Well: NBU 921-21L1S
Wellbore: NBU 921-21L1S
Section:
SHL:
Design: NBU 921-21L1S (wp01)
Latitude: 40.022561
Longitude: -109.563033
GL: 4838.00
KB: 4838' gl + 26' rkb @ 4864.00ft (h&p 298)

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4948.00	4995.10	WASATCH
5548.00	5595.11	top of cylinder
7908.00	7955.13	MESAVERDE
10154.00	10201.16	SEGO

WELL DETAILS: NBU 921-21L1S

Ground Level: 4838.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	14537504.32	2042726.12	40.022561	-109.563033	

CASING DETAILS

TVD	MD	Name	Size
2812.81	2852.06	8-5/8"	8-5/8

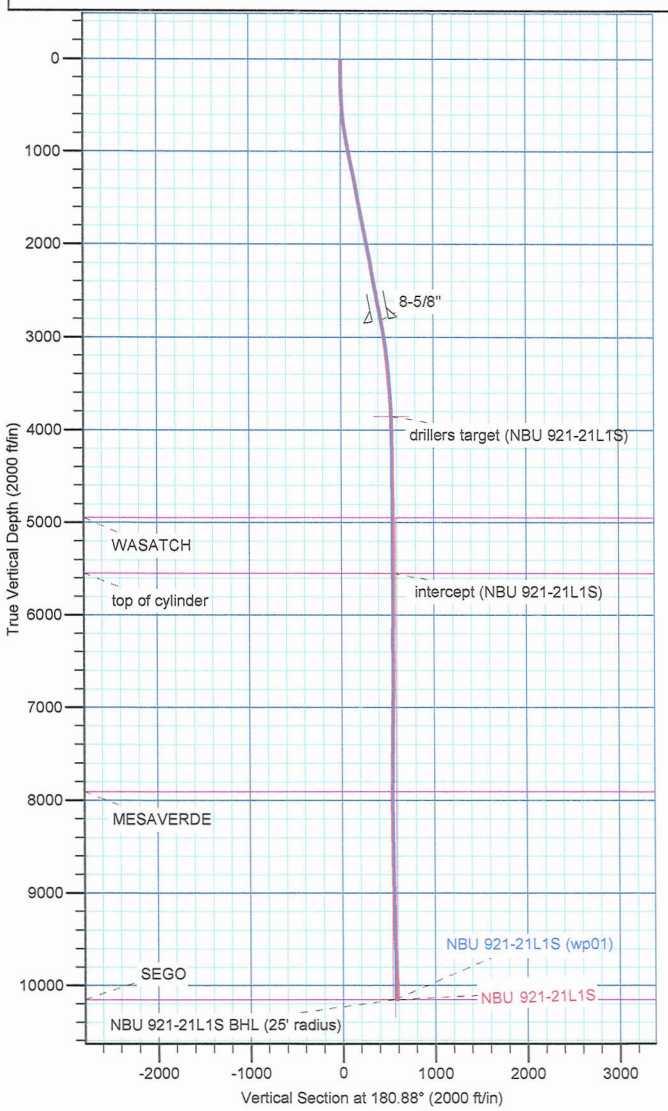
Azimuths to True North
Magnetic North: 11.00°
Magnetic Field
Strength: 52253.7snT
Dip Angle: 65.85°
Date: 4/3/2012
Model: IGRF2010

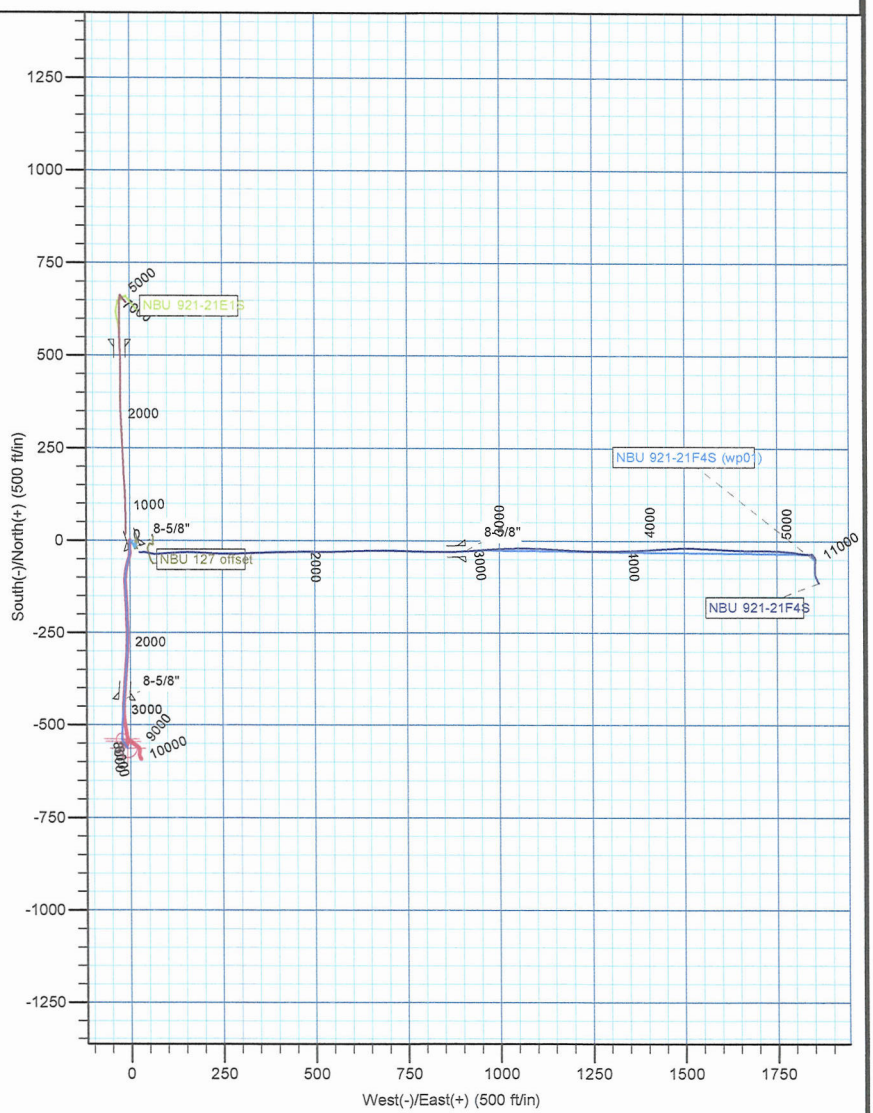
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
drillers target (NBU 921-21L1S)	3854.00	-538.42	-24.68	14536965.58	2042710.13	40.021083	-109.563121	Circle (Radius: 15.00)
intercept (NBU 921-21L1S)	5548.00	-544.81	-20.53	14536959.25	2042714.38	40.021065	-109.563106	Point
NBU 921-21L1S BHL (25' radius)	10154.00	-563.42	-8.68	14536940.83	2042726.53	40.021014	-109.563064	Circle (Radius: 25.00)

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DIeg	TFace	VSect
2826.00	11.26	183.54	2787.26	-426.37	-17.45	0.00	0.00	426.59
2976.00	11.26	183.54	2934.37	-455.60	-19.25	0.00	0.00	455.85
3836.02	0.15	349.93	3788.93	-538.59	-24.65	1.33	179.82	538.90
3901.09	0.15	349.93	3854.00	-538.42	-24.68	0.00	0.00	538.74
4039.58	0.27	147.52	3992.49	-538.52	-24.53	0.30	165.41	538.84
10201.16	0.27	147.52	10154.00	-563.42	-8.68	0.00	0.00	563.49





US ROCKIES REGION PLANNING

UTAH - UTM (feet), NAD27, Zone 12N
UINTAH_NBU 921-21E PAD
NBU 921-21L1S

NBU 921-21L1S

Design: NBU 921-21L1S

Standard Survey Report

30 May, 2012

Anadarko Petroleum Corp

Survey Report

Company:	US ROCKIES REGION PLANNING	**Local Co-ordinate Reference:**	Well NBU 921-21L1S
Project:	UTAH - UTM (feet), NAD27, Zone 12N	**TVD Reference:**	4838' gl + 26' rkb @ 4864.00ft (h&p 298)
Site:	UINTAH_NBU 921-21E PAD	**MD Reference:**	4838' gl + 26' rkb @ 4864.00ft (h&p 298)
Well:	NBU 921-21L1S	**North Reference:**	True
Wellbore:	NBU 921-21L1S	**Survey Calculation Method:**	Minimum Curvature
Design:	NBU 921-21L1S	**Database:**	edmp

Project	UTAH - UTM (feet), NAD27, Zone 12N		
Map System:	Universal Transverse Mercator (US Survey Feet)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Zone 12N (114 W to 108 W)		

Site	UINTAH_NBU 921-21E PAD				
Site Position:		**Northing:**	14,537,473.41 usft	**Latitude:**	40.022475
From:	Lat/Long	**Easting:**	2,042,751.54 usft	**Longitude:**	-109.562944
Position Uncertainty:	0.00 ft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.92 °

Well	NBU 921-21L1S					
Well Position	**+N/-S**	0.00 ft	**Northing:**	14,537,504.33 usft	**Latitude:**	40.022561
	+E/-W	0.00 ft	**Easting:**	2,042,726.12 usft	**Longitude:**	-109.563033
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	4,838.00 ft

Wellbore	NBU 921-21L1S				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2010	4/3/2012	11.00	65.85	52,254

Design	NBU 921-21L1S					
Audit Notes:						
Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**		17.00
Vertical Section:	**Depth From (TVD) (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Direction (°)**		
	17.00	0.00	0.00	177.25		

Survey Program **Date** 5/30/2012

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
247.00	2,826.00	Survey #1 (NBU 921-21L1S)	MWD	MWD - STANDARD
2,939.00	10,201.00	Survey #2 (NBU 921-21L1S)	MWD	MWD - STANDARD

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
17.00	0.00	0.00	17.00	0.00	0.00	0.00	0.00	0.00	0.00
247.00	0.79	191.01	246.99	-1.56	-0.30	1.54	0.34	0.34	0.00
339.00	2.73	192.59	338.94	-4.32	-0.90	4.27	2.11	2.11	1.72
429.00	3.25	184.51	428.82	-8.95	-1.57	8.87	0.74	0.58	-8.98
524.00	4.18	175.52	523.62	-15.09	-1.51	15.00	1.15	0.98	-9.46
617.00	5.46	174.31	616.29	-22.87	-0.81	22.81	1.38	1.38	-1.30
712.00	7.21	186.35	710.71	-33.29	-1.02	33.21	2.30	1.84	12.67
806.00	9.15	194.62	803.75	-46.39	-3.56	46.17	2.41	2.06	8.80
900.00	10.73	193.82	896.34	-62.12	-7.53	61.69	1.69	1.68	-0.85
993.00	11.72	189.91	987.56	-79.83	-11.23	79.20	1.34	1.06	-4.20

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Well:	NBU 921-21L1S	**North Reference:**	True
Wellbore:	NBU 921-21L1S	**Survey Calculation Method:**	Minimum Curvature
Design:	NBU 921-21L1S	**Database:**	edmp

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,087.00	12.57	181.78	1,079.46	-99.46	-13.19	98.72	2.03	0.90	-8.65
1,179.00	11.61	178.88	1,169.42	-118.73	-13.32	117.95	1.23	-1.04	-3.15
1,273.00	12.05	177.21	1,261.43	-137.98	-12.66	137.22	0.59	0.47	-1.78
1,368.00	10.47	173.49	1,354.60	-156.47	-11.20	155.75	1.83	-1.66	-3.92
1,463.00	9.94	178.27	1,448.09	-173.24	-9.97	172.56	1.05	-0.56	5.03
1,558.00	10.73	179.85	1,541.55	-190.28	-9.70	189.59	0.88	0.83	1.66
1,653.00	10.99	178.80	1,634.85	-208.17	-9.49	207.48	0.34	0.27	-1.11
1,749.00	11.17	176.33	1,729.06	-226.60	-8.70	225.92	0.53	0.19	-2.57
1,843.00	11.34	178.36	1,821.26	-244.93	-7.85	244.27	0.46	0.18	2.16
1,936.00	10.73	181.70	1,912.54	-262.72	-7.85	262.04	0.95	-0.66	3.59
2,031.00	11.17	180.29	2,005.81	-280.76	-8.16	280.05	0.54	0.46	-1.48
2,125.00	11.14	182.36	2,098.03	-298.94	-8.58	298.18	0.43	-0.03	2.20
2,219.00	10.22	182.52	2,190.40	-316.34	-9.32	315.53	0.98	-0.98	0.17
2,314.00	9.67	184.24	2,283.97	-332.72	-10.28	331.84	0.66	-0.58	1.81
2,410.00	9.94	183.28	2,378.57	-349.03	-11.35	348.09	0.33	0.28	-1.00
2,504.00	10.07	185.61	2,471.14	-365.31	-12.61	364.29	0.45	0.14	2.48
2,599.00	10.90	185.56	2,564.56	-382.52	-14.30	381.39	0.87	0.87	-0.05
2,694.00	11.08	183.98	2,657.81	-400.56	-15.80	399.34	0.37	0.19	-1.66
2,756.00	11.42	183.55	2,718.62	-412.63	-16.59	411.36	0.56	0.55	-0.69
2,826.00	11.26	183.54	2,787.26	-426.37	-17.45	425.04	0.23	-0.23	-0.01
2,939.00	10.32	181.98	2,898.26	-447.50	-18.48	446.10	0.87	-0.83	-1.38
3,033.00	8.80	179.86	2,990.95	-463.10	-18.75	461.67	1.66	-1.62	-2.26
3,127.00	7.45	175.28	3,084.00	-476.37	-18.23	474.95	1.59	-1.44	-4.87
3,222.00	6.38	171.29	3,178.31	-487.72	-16.92	486.35	1.23	-1.13	-4.20
3,316.00	5.63	168.54	3,271.80	-497.41	-15.22	496.10	0.85	-0.80	-2.93
3,411.00	5.75	173.04	3,366.33	-506.70	-13.71	505.46	0.49	0.13	4.74
3,505.00	5.31	172.42	3,459.89	-515.68	-12.57	514.49	0.47	-0.47	-0.66
3,600.00	4.69	167.42	3,554.53	-523.83	-11.14	522.69	0.80	-0.65	-5.26
3,694.00	4.13	167.92	3,648.25	-530.89	-9.60	529.82	0.60	-0.60	0.53
3,789.00	3.69	166.42	3,743.03	-537.21	-8.17	536.20	0.48	-0.46	-1.58
3,883.00	2.94	173.42	3,836.87	-542.54	-7.18	541.57	0.91	-0.80	7.45
3,978.00	1.38	180.54	3,931.80	-546.11	-6.91	545.15	1.66	-1.64	7.49
4,072.00	0.82	240.39	4,025.79	-547.57	-7.51	546.58	1.28	-0.60	63.67
4,167.00	1.38	214.17	4,120.77	-548.85	-8.74	547.80	0.78	0.59	-27.60
4,261.00	0.50	265.42	4,214.76	-549.82	-9.78	548.72	1.21	-0.94	54.52
4,356.00	0.81	231.04	4,309.75	-550.28	-10.72	549.13	0.51	0.33	-36.19
4,450.00	0.19	79.67	4,403.75	-550.67	-11.08	549.50	1.04	-0.66	-161.03
4,544.00	0.69	143.67	4,497.75	-551.10	-10.59	549.95	0.67	0.53	68.09
4,639.00	1.25	149.79	4,592.73	-552.45	-9.73	551.35	0.60	0.59	6.44
4,733.00	0.19	212.29	4,686.72	-553.47	-9.30	552.39	1.25	-1.13	66.49
4,828.00	0.75	194.54	4,781.72	-554.21	-9.54	553.11	0.60	0.59	-18.68
4,923.00	1.13	186.67	4,876.71	-555.74	-9.81	554.63	0.42	0.40	-8.28
5,017.00	0.44	215.42	4,970.70	-556.95	-10.12	555.83	0.82	-0.73	30.59

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Wellbore:	NBU 921-21L1S	**Survey Calculation Method:**	Minimum Curvature
Design:	NBU 921-21L1S	**Database:**	edmp

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,112.00	0.31	221.29	5,065.70	-557.44	-10.50	556.30	0.14	-0.14	6.18
5,206.00	0.63	320.54	5,159.69	-557.24	-11.00	556.07	0.79	0.34	105.59
5,300.00	0.50	309.79	5,253.69	-556.57	-11.64	555.38	0.18	-0.14	-11.44
5,395.00	0.56	275.04	5,348.68	-556.27	-12.43	555.03	0.34	0.06	-36.58
5,489.00	0.63	312.67	5,442.68	-555.88	-13.26	554.60	0.41	0.07	40.03
5,584.00	0.56	334.04	5,537.68	-555.11	-13.85	553.80	0.24	-0.07	22.49
5,679.00	0.44	319.92	5,632.67	-554.41	-14.29	553.09	0.18	-0.13	-14.86
5,773.00	0.31	258.42	5,726.67	-554.18	-14.77	552.84	0.42	-0.14	-65.43
5,868.00	0.44	252.92	5,821.67	-554.34	-15.37	552.97	0.14	0.14	-5.79
5,962.00	0.75	226.67	5,915.66	-554.87	-16.16	553.46	0.43	0.33	-27.93
6,057.00	0.06	314.79	6,010.66	-555.26	-16.65	553.83	0.79	-0.73	92.76
6,151.00	0.06	6.54	6,104.66	-555.18	-16.68	553.74	0.06	0.00	55.05
6,246.00	0.25	102.42	6,199.66	-555.17	-16.47	553.75	0.28	0.20	100.93
6,341.00	0.31	106.42	6,294.66	-555.29	-16.02	553.88	0.07	0.06	4.21
6,435.00	0.31	88.79	6,388.66	-555.36	-15.52	553.97	0.10	0.00	-18.76
6,530.00	0.44	106.67	6,483.66	-555.46	-14.92	554.10	0.18	0.14	18.82
6,624.00	0.63	119.04	6,577.65	-555.81	-14.12	554.49	0.24	0.20	13.16
6,718.00	0.19	103.04	6,671.65	-556.10	-13.52	554.81	0.48	-0.47	-17.02
6,813.00	0.19	100.29	6,766.65	-556.16	-13.21	554.89	0.01	0.00	-2.89
6,907.00	0.88	29.92	6,860.64	-555.56	-12.69	554.32	0.89	0.73	-74.86
7,002.00	0.81	60.67	6,955.63	-554.60	-11.75	553.40	0.48	-0.07	32.37
7,096.00	0.84	23.43	7,049.62	-553.65	-10.89	552.49	0.56	0.03	-39.62
7,191.00	1.00	358.17	7,144.61	-552.18	-10.64	551.03	0.45	0.17	-26.59
7,285.00	0.88	347.79	7,238.60	-550.65	-10.82	549.50	0.22	-0.13	-11.04
7,380.00	1.00	4.04	7,333.59	-549.11	-10.92	547.96	0.31	0.13	17.11
7,474.00	0.75	14.29	7,427.58	-547.70	-10.71	546.55	0.31	-0.27	10.90
7,569.00	0.81	37.29	7,522.57	-546.56	-10.15	545.45	0.33	0.06	24.21
7,663.00	0.31	20.29	7,616.56	-545.79	-9.66	544.70	0.55	-0.53	-18.09
7,758.00	0.25	350.79	7,711.56	-545.35	-9.60	544.26	0.16	-0.06	-31.05
7,852.00	0.44	47.67	7,805.56	-544.90	-9.37	543.83	0.39	0.20	60.51
7,947.00	0.38	70.29	7,900.56	-544.55	-8.80	543.50	0.18	-0.06	23.81
8,042.00	0.38	84.79	7,995.56	-544.42	-8.19	543.40	0.10	0.00	15.26
8,136.00	0.50	94.42	8,089.55	-544.42	-7.47	543.43	0.15	0.13	10.24
8,230.00	0.69	98.92	8,183.55	-544.54	-6.50	543.60	0.21	0.20	4.79
8,325.00	0.81	117.54	8,278.54	-544.94	-5.34	544.05	0.28	0.13	19.60
8,420.00	1.19	106.79	8,373.53	-545.53	-3.80	544.72	0.44	0.40	-11.32
8,514.00	1.75	110.79	8,467.49	-546.32	-1.53	545.62	0.61	0.60	4.26
8,609.00	2.13	114.92	8,562.44	-547.58	1.43	547.02	0.43	0.40	4.35
8,709.00	1.88	122.29	8,662.38	-549.24	4.50	548.83	0.36	-0.25	7.37
8,798.00	2.06	125.17	8,751.33	-550.94	7.05	550.65	0.23	0.20	3.24
8,892.00	2.56	127.79	8,845.25	-553.20	10.09	553.05	0.54	0.53	2.79
8,986.00	2.69	126.04	8,939.15	-555.79	13.53	555.80	0.16	0.14	-1.86
9,081.00	2.31	131.04	9,034.06	-558.36	16.77	558.52	0.46	-0.40	5.26

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Wellbore:	NBU 921-21L1S	**Survey Calculation Method:**	Minimum Curvature
Design:	NBU 921-21L1S	**Database:**	edmp

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,175.00	2.56	124.92	9,127.98	-560.80	19.93	561.11	0.38	0.27	-6.51
9,270.00	2.06	147.02	9,222.90	-563.45	22.59	563.88	1.07	-0.53	23.26
9,364.00	1.31	170.17	9,316.86	-565.92	23.70	566.41	1.06	-0.80	24.63
9,458.00	1.44	179.67	9,410.83	-568.16	23.89	568.66	0.28	0.14	10.11
9,553.00	2.06	179.42	9,505.79	-571.07	23.91	571.56	0.65	0.65	-0.26
9,647.00	1.81	180.67	9,599.73	-574.24	23.91	574.73	0.27	-0.27	1.33
9,742.00	1.81	180.54	9,694.69	-577.24	23.88	577.72	0.00	0.00	-0.14
9,836.00	1.94	180.04	9,788.64	-580.32	23.86	580.79	0.14	0.14	-0.53
9,931.00	1.94	162.17	9,883.58	-583.45	24.36	583.95	0.63	0.00	-18.81
10,026.00	1.88	160.17	9,978.53	-586.45	25.38	586.99	0.09	-0.06	-2.11
10,120.00	2.19	148.79	10,072.47	-589.44	26.83	590.05	0.54	0.33	-12.11
10,201.00	2.19	148.79	10,153.41	-592.08	28.43	592.77	0.00	0.00	0.00

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
2,826.00	2,787.26	-426.37	-17.45	tie on
10,120.00	10,072.47	-589.44	26.83	last mwd survey
10,201.00	10,153.41	-592.08	28.43	projection

Checked By: _____ Approved By: _____ Date: _____